

*Bibliography on*  
**COLD REGIONS  
SCIENCE AND TECHNOLOGY**

AD-A190 162

DTIC  
ELECTE  
MAR 17 1988  
S D

**VOLUME 41, PART 2, 1987**

DISTRIBUTION STATEMENT A  
Approved for public release  
Distribution Unlimited

<b>REPORT DOCUMENTATION PAGE</b>		<b>1. REPORT NO.</b> CRREL Rpt. 12, Vol. 41, Part 2	<b>2.</b>	<b>3. Recipient's Accession No.</b>	
<b>4. Title and Subtitle</b> Bibliography on Cold Regions Science and Technology Vol. 41, Part 2				<b>5. Report Date</b> December 1987	
<b>7. Author(s)</b> Geza Thuronyi, Editor				<b>6.</b>	
<b>9. Performing Organization Name and Address</b> Cold Regions Bibliography Project Science and Technology Division Library of Congress Washington, D.C.				<b>8. Performing Organization Rept. No.</b>	
<b>12. Sponsoring Organization Name and Address</b> U.S. Army Cold Regions Research and Engineering Laboratory Hanover, New Hampshire 03755-1290				<b>10. Project/Task/Work Unit No.</b>	
				<b>11. Contract(C) or Grant(G) No.</b> (C) (G)	
				<b>13. Type of Report &amp; Period Covered</b>	
<b>15. Supplementary Notes</b>				<b>14.</b>	
<b>16. Abstract (Limit: 200 words)</b> <p>The <u>Bibliography on Cold Regions Science and Technology</u> is a continuing publication prepared by the Library of Congress for the U.S. Army Cold Regions Research and Engineering Laboratory. The present volume contains material accessioned between October 1986 and September 1987. In the author index, authors, title, date, pagination and language of the document and the accession number are listed. The subject index is composed of four basic elements: 1) terms taken from a controlled vocabulary, based on the <u>Thesaurus of Engineering and Scientific Terms</u>; 2) free terms added as needed, 3) geographic names, and 4) cross references suggesting additional appropriate terms. Full citations of 4639 items is issued As Volume 41, Part 1.</p>					
<b>17. Document Analysis a. Descriptors</b>  <b>b. Identifiers/Open-Ended Terms</b> Bibliographies Cold regions  <b>c. COSATI Field/Group</b>					
<b>18. Availability Statement</b> Approved for public release; distribution is unlimited.		<b>19. Security Class (This Report)</b> Unclassified		<b>21. No. of Pages</b> 455	
		<b>20. Security Class (This Page)</b> Unclassified		<b>22. Price</b> \$30.50	



December 1987



**US Army Corps  
of Engineers**

Cold Regions Research &  
Engineering Laboratory

# ***Bibliography on COLD REGIONS SCIENCE AND TECHNOLOGY***

**VOLUME 41, PART 2, 1987**

**Geza T. Thuronyi, Editor**



*Paper copy*

Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
<i>\$30.50</i>	
<i>NTIS - \$12.00</i>	
<i>SOURCE - \$18.50</i>	
Availability Codes	
Dist	Avail and/or Special
<i>A-1 21</i>	

## **NOTE**

This is a companion issue to Vol. 41, Pt. 1. The latter contains the full bibliographic citations referred to in the author and subject indexes included in this issue. In the author index, principal and joint personal and corporate authors are listed along with the title, date, pagination, and language of the document and the accession number. The subject index is composed of four basic elements: 1) terms taken from a controlled vocabulary based on the *Thesaurus of Engineering and Scientific Terms* (LEX-EJC), 2) free terms added as needed, 3) geographic names, generally entered under countries, 4) cross references suggesting additional appropriate terms. The terms are listed in a single alphabetical arrangement, along with title (original, translated, abridged, expanded, or supplied), principal author, date, pagination, and language of pertinent documents, and their accession numbers.

This publication is available from the National Technical Information Service, Springfield, Virginia 22151. When ordering, both Parts 1 and 2 should be included, as they are complementary.

# AUTHOR INDEX

- Aakjaer, P.**  
Modelling of polar lows in an idealized environment [1986, p.177-186, eng] 41-1805
- Abadzhian, K.A.**  
Reinforced concrete for petroleum industry structures of the Arctic Shelf [1985, p.32-33, rus] 41-3205
- Abakumenko, A.E.**  
Distribution of ground water naleds in the central BAM zone (from spaceborne photographs) [1986, p.86-94, rus] 41-3520  
Satellite methods of studying naleds in the central and western parts of the BAM zone [1986, p.94-99, rus] 41-3521
- Abashev, N.V.**  
Experimental thawing of the permafrost base beneath the reconstructed main body of the Chita-I heat and electric power plant [1986, p.9-10, rus] 41-4617
- Abashin, S.I.**  
Determining the state of stress in shaft timbering during thawing [1986, p.28-29, rus] 41-3769
- Abdelrazik, M.**  
Dielectric properties of snow in the 3 to 37 GHz range [1986, p.1329-1340, eng] 41-2313
- Abdelrazik, M.A.**  
Measurements and modeling of the dielectric behavior of snow in the 1.0 to 37.0 GHz frequency range [1985, 460p., eng] 41-2583
- Abdullaev, A.A.**  
Formation of radiation regimes of forest geosystems in the southern part of the Tyumen' region [1986, p.52-56, rus] 41-2249
- Abdullaev, A.U.**  
Stabilization of sagging loess by detonation energy, with preliminary wetting, under conditions of dissected relief [1986, p.16-19, rus] 41-880
- Abe, Y.**  
Changes in properties of asphalt concretes due to aging [1987, p.85-116, eng] 41-4022  
Investigation on the straight asphalt properties of Japan [1987, p.1-36, eng] 41-4020
- Abele, G.**  
Effect of cold weather on productivity [1986, p.61-66, eng] 41-409  
Effects of cold environment on rapid runway repairs [1986, p.1-9, eng] 41-1355
- Abernathy, A.R.**  
Overland flow wastewater treatment at Easley, S.C. [1985, p.291-299, eng] 41-1899
- Abrahamson, J.**  
Field test to assess snow-slope stability [1986, p.535-537, eng] 41-4310
- Abramenko, A.N.**  
Start-up dynamics of an arterial heat pipe from the frozen or chilled state [1987, p.1283-1288, eng] 41-4161
- Abramenkov, N.M.**  
Possibility of calculating mean water depths on the Amudarya River during its freezing [1986, p.48-51, rus] 41-700
- Abramov, A.A.**  
Frost-resistant coated optical fibres [1985, p.805-807, eng] 41-1411
- Abramov, V.E.**  
Foundationless low-rise buildings for structurally unstable ground [1985, p.18-19, rus] 41-282
- Abramovich, K.G.**  
Methods of numerical mapping of zones of intensive convection, clear-air turbulence, and icing [1985, p.3-15, rus] 41-1195
- Abyzov, S.S.**  
Preliminary results of microbiological investigations at Mirnyy [1986, p.133-136, rus] 41-1270  
Pseudomonas bacterium from an antarctic glacial ice sheet [1987, p.288-297, eng] 41-4610  
Pseudomonas genus of bacteria isolated from Antarctic ice sheets [1986, p.494-504, rus] 41-1824
- Abzhallimov, R.Sh.**  
Calculation of stresses in walls of unheated one-story buildings built on shallow foundations over frost-heaving ground [1985, p.32-34, rus] 41-290
- Acedo, W.**  
Vegetation and a Landsat-derived land cover map of the Beechey Point quadrangle, Arctic Coastal Plain, Alaska [1987, 63p., eng] 41-4367
- Achaval, E.M. de**  
Annealing effects on the hailstone structure [1984, p.271-274, eng] 41-4398
- Ackley, S.F.**  
Growth, structure, and properties of sea ice [1986, p.9-164, eng] 41-2987  
Ice nucleation activity of antarctic marine microorganisms [1985, p.126-128, eng] 41-2955  
Icing and wind loading on a simulated power line [1986, p.23-27, eng] 41-2967  
Reports of the U.S. - U.S.S.R. Weddell Polynya Expedition, October-November 1981 Vol.8: collected reprints [1986, 158p., eng] 41-460  
Sea spray icing: a review of current models [1986, p.239-262, eng] 41-936
- Adamache, M.**  
Legal implications of changing the application rates of salt on highways and sidewalks [1980, 51p., eng] 41-239
- Adams, L.J.**  
Helicopter deicer control system [1981, 18 col. + 7 sheets, eng] 41-2368
- Adams, P.**  
Archive of the ice record from Knob Lake, Quebec, 1954 to present [1985, p.284-289, eng] 41-1506  
Development and roles of the Eastern Snow Conference [1985, p.1-24, eng] 41-1480  
Radiation budget of a subarctic woodland canopy [1986, p.172-176, eng] 41-212  
Variations in ionic composition between High Arctic lake and land snowpack [1985, p.277-283, eng] 41-1505
- Adams, P.F.**  
Prospects for development in Canadian frontier regions—implications for research [1986, p.36-63, eng] 41-2265  
Tomorrow's technology in sub-Arctic and Arctic hydrocarbon exploration [1986, p.312-316, eng] 41-2281
- Adams, W.P.**  
Canada and polar science [1987, 116p. + appends., eng] 41-3414  
Chemistry of a temperate pond's decaying winter cover [1984, p.139-142, eng] 41-1954  
Effects of snow and ice on wetland water chemistry [1984, p.143-147, eng] 41-1955  
Northern limnological processes: research and management [1987, p.112-146, eng] 41-3236  
Observations of chlorophylls in high arctic sea ice in winter [1984, p.148-152, eng] 41-1956  
Spectral distribution of light under a subarctic winter lake cover [1986, p.89-95, eng] 41-484
- Adamson, D.A.**  
Crystallographic study of the perennially frozen ice surface of Patterned Lake, Framnes Mountains, East Antarctica [1986, p.520-526, eng] 41-4307
- Adley, M.D.**  
Calibrating HEC-2 in a shallow, ice-covered river [1986, 25 refs., eng] 41-2531
- Admiral, P.**  
From snowflakes to ice grains. Microphysical aspects of snow making [1985, p.33-44, fre] 41-862
- Adsit, N.R.**  
Composites for extreme environments [1982, 179p., eng] 41-1987
- Adushinov, A.A.**  
Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR [1986, p.52-59, rus] 41-3331
- Aellen, M.**  
Recent variations of glaciers in the Swiss Alps [1985, p.73-82, fre] 41-3176
- Afanasenko, V.E.**  
Interactions between artificial water bodies and permafrost and the development of exogenic processes in reservoir zones [1986, p.120-127, rus] 41-2092  
Mapping the distribution of polluted ground water in cryogenic hydrogeological structures [1986, p.95-99, rus] 41-2088
- Afanas'ev, E.M.**  
On the least resistance line of curvilinear blow-out charges detonated in permafrost [1986, p.61-66, rus] 41-2906
- Afanas'ev, I.U.A.**  
Scientific problems and basic results of the "Kosmos-1500" experiment [1986, p.4-20, rus] 41-2715
- Afonskais, L.G.**  
Interactions between artificial water bodies and permafrost and the development of exogenic processes in reservoir zones [1986, p.120-127, rus] 41-2092
- Agafonov, N.T.**  
Rational use of natural resources under northern conditions. Collection of works [1985, 113p., rus] 41-3433
- Agaltseva, N.A.**  
Possibility of calculating mean water depths on the Amudarya River during its freezing [1986, p.48-51, rus] 41-700
- Ageta, Y.**  
Glaciological research program in east Queen Maud Land, East Antarctica, Part 5, 1985 [1987, 71p., eng] 41-3668
- Agranat, G.A.**  
Trends in the development of new mining regions [1986, p.14-25, rus] 41-1821
- Agüera, J.M.**  
Avalanche of the century, at the end of January 1986, on Mont Canigou, eastern Pyrenees [1986, p.13-24, fre] 41-870
- Aguirre-Puente, J.**  
Numerical two-dimensional study of thermal behaviour around a cylindrical cooled underground cavity. Domain of validity of an axisymmetrical scheme [1986, p.105-114, eng] 41-1281
- A'Hearn, M.F.**  
S2: a clue to the origin of cometary ice? [1985, p.463-471, eng] 41-1719
- Ahrens, T.J.**  
Impact experiments in low-temperature ice [1987, p.506-518, eng] 41-4177  
Shock vaporization and the accretion of the icy satellites of Jupiter and Saturn [1985, p.631-654, eng] 41-1728
- Aihara, H.**  
Conversion of a low-speed wind tunnel to a snowdrift wind tunnel [1986, p.291-294, eng] 41-1296
- Also, M.**  
Microbiological investigation of the human pollution at Syowa Station in Antarctica. Special reference to the specimen collected by the 23rd Japanese Antarctic Research Expedition. Pt.2 [1985, p.541-546, jpn] 41-3568
- Altcin, P.**  
Durability of an arctic concrete [1987, p.919-933, eng] 41-3713
- Altcin, P.-C.**  
Freeze-thaw durability of concrete with and without silica fume in ASTM C 666 (procedure A) test method: internal cracking versus scaling [1986, p.76-85, eng] 41-2897
- Altmatov, I.T.**  
Scientific and technical progress in road construction [1984, 188p., rus] 41-785
- Akademii nauk SSSR. Sibirskoe otdelenie. Institut geokhimi**  
Improving the efficiency of geochemical exploration methods in taiga (8th Session of the Siberian branch of SGPM) summaries of reports [1986, 240p., rus] 41-197
- Akagawa, S.**  
In situ frost heaving test based on the segregation potential concept [1986, p.99-107, jpn] 41-3883
- Akbarov, A.A.**  
Mass balance and trends in glacier changes in the USSR [1986, p.43-59, rus] 41-775  
Mass balance of Central Asia glaciers and its relation to river runoff [1986, p.56-59, 170-173, rus] 41-4340  
Water resources in glaciers of the Syrdarya River basin [1986, p.80-88, rus] 41-778
- Åkerman, H.J.**  
Permafrost mounds in the Abisko area, northern Sweden [1986, p.155-165, eng] 41-1874
- Akhmanova, M.V.**  
Water in regolith from Mare Crisium (Luna 24)? [1978, p.285-288, rus] 41-3208
- Akitaya, E.**  
Distribution of depth hoar in Honshu, Japan [1986, p.198-206, jpn] 41-2603  
Report of pit-wall observations of snow cover in Sapporo [1986, p.1-10, jpn] 41-3501  
Structure of quick hardened snow under temperature gradient [1986, p.11-18, jpn] 41-3875

- Akiyama, M.**  
Soil nutrient condition related to the distribution of terrestrial algae near Syowa Station, Antarctica [1986, p.198-201, eng] 41-3636
- Aksel'rod, S.B.**  
Improving the performance of cooling systems on ice navigating ships [1986, p.23-31, rus] 41-3388
- Aksenov, B.G.**  
Energy transfer in soil with nonequilibrium phase transformation [1986, p.156-161, rus] 41-2558
- Aksenov, V.G.**  
Evaluating the solutions of nonlinear problems on freezing and thawing of moist ground [1986, p.350-353, rus] 41-2306
- Aksenova, E.Sh.**  
Thermal and technical properties of light concretes of one-layer enclosures designed for the North [1986, p.36-37, rus] 41-1889
- Aksenova, E.Sh.-R.**  
Requirements for thermotechnical properties of lightweight concretes for one-layer enclosures for the North [1986, p.42-53, rus] 41-2919
- Aksutova, L.K.**  
Formation of a microscopic ice filament in an electric field [1985, p.619-620, eng] 41-2330
- Aktan, D.**  
Thermocorrosion of frozen sediment under wave action [1986, p.140-158, eng] 41-2016
- Akulichev, V.A.**  
Periodic phase transformations in liquids [1986, 280p., rus] 41-1271
- Alamanov, S.K.**  
Territorial concordance of long-range runoff fluctuations during vegetational periods on rivers of northern Kirgizia [1984, p.63-68, rus] 41-726
- Alant'ev, M.V.**  
Engineering preparations for construction of Surgut State Regional Electric Power Plant No.2 [1987, p.14-17, rus] 41-3808
- Alaska testlab: helping contractors avoid costly mistakes**  
Alaska testlab: helping contractors avoid costly mistakes [1984, p.36-40, eng] 41-1330
- Alaska. University. Arctic Environmental Information and Data Center**  
Bibliography and index of inventory and analysis information on the North Slope Borough coastal resource district: Canning River-Kuparuk River [1979, 60p., eng] 41-2193
- Albee, W.H., Sr.**  
"Floating-On": advanced environmental technology using floatons for economical transportation systems over difficult "off-road" terrain [1986, p.679-692, eng] 41-2051
- Alberga, A.H.**  
Disk camera system for automatic recording of visual data: snow depth in field plots [1987, p.927-929, eng] 41-4230
- Albert, D.G.**  
Effect of snow on vehicle-generated seismic signatures [1987, p.881-887, eng] 41-3887  
Fortran subroutines for zero-phase digital frequency filters [1986, 26p., eng] 41-3648
- Albert, M.R.**  
Moving boundary—moving mesh analysis of phase change using finite elements with transfinite mappings [1986, p.591-607, eng] 41-607  
Transient two-dimensional phase change with convection, using deforming finite elements [1985, p.229-243, eng] 41-657  
Use of transfinite mappings with finite elements on a moving mesh for two-dimensional phase change [1983, p.85-110, eng] 41-659
- Aldrich, D.F.**  
Thermal performance of rigid cellular foam insulation at sub-freezing temperatures [1986, p.500-509, eng] 41-1384
- Alean, J.**  
Ice avalanches and a landslide on Grosser Aletschgletscher [1984, p.9-25, eng] 41-622
- Aleksandrov, B.M.**  
Multivariate regression analysis of the process of frozen peat dehydration [1986, p.15-19, rus] 41-3766
- Aleksandrov, E.I.**  
Influence of atmospheric circulation on long-term changes in ice conditions of the Soviet Arctic seas [1986, p.118-122, rus] 41-118
- Aleksandrov, I.U.A.**  
Strengthening bearing ground for substations by freezing it with seasonally active vapor-fluid cooling devices [1986, p.7-8, rus] 41-911  
Using thermopiles for construction in the Vorkuta region [1983, p.88-94, rus] 41-4479
- Aleksandrov, V.IU.**  
Estimating the effect of atmospheric precipitation on sea-ice radar images [1987, p.37-43, rus] 41-4619  
Influence of reflections from atmospheric precipitation on the characteristics of radar images of sea ice [1985, p.70-76, rus] 41-3431  
Sea ice concentration assessed from aerospace imagery [1987, p.181-189, eng] 41-3626
- Aleksandrovskaia, E.K.**  
Stress-strain state of the Sayano-Sushenskoe dam during filling of the reservoir [1986, p.123-129, eng] 41-2713
- Aleksandrovskii, S.V.**  
Service life of enclosures. Present state and ways of developing the problem [1986, p.122-167, rus] 41-4502
- Aleksanina, M.G.**  
Classification of sea ice according to structural characteristics [1985, p.52-58, rus] 41-3544
- Alekseev, L.S.**  
Water supply in populated points of northern regions [1987, p.6-8, rus] 41-3934
- Alekseev, V.A.**  
Impact of ejecta from coal-fueled power plants on paludal north-taiga pine forests [1986, p.664-672, rus] 41-2562
- Alekseev, V.N.**  
Periodic phase transformations in liquids [1986, 280p., rus] 41-1271
- Alekseev, V.R.**  
Cartographic problems of applied glaciology [1986, p.144-146, rus] 41-1657  
Problems of engineering glaciology [1986, 223p., rus] 41-2145
- Alekseeva, A.K.**  
Trends in variations of mountain river runoff in the USSR related to climatic changes [1986, p.78-82, 191-195, rus] 41-4345
- Alekseeva, T.I.**  
Regional characteristics of urban planning and construction in Siberia and the North [1987, 208p., rus] 41-3804
- Aletsee, L.**  
Phytoplankton biomass and productivity in the marginal ice zone of the Fram Strait during summer 1984 [1987, p.6777-6786, eng] 41-4237
- Alexander, D.R.**  
Airfield pavement evaluation, Bryant Army Airfield (Fort Richardson), Anchorage, Alaska [1986, 36p. + figs., eng] 41-524
- Alftmow, A.V.**  
Thermal regime of upper soil layers in basic ecosystems of the thin-forest belt in the Upper Kolyma basin [1985, p.9-29, rus] 41-4119
- Alger, G.R.**  
Composite resistance to flow with an ice cover [1987, p.812-817, eng] 41-4223
- Alimov, A.G.**  
Designing canal linings for frost heaving ground [1986, p.19-24, rus] 41-2554
- Allan, C.**  
Variations in ionic composition between High Arctic lake and land snowpack [1985, p.277-283, eng] 41-1505
- Allan, D.**  
Engineering applications and risk assessment: summary and discussion [1986, p.31-37, eng] 41-3089  
Risk assessment for iceberg-scour damage: Labrador Sea and Grand Banks [1986, p.240-248, eng] 41-3116
- Allee, P.A.**  
Ice nucleus measurement intercomparisons using three systems and three natural ice nucleants [1982, p.119-122, eng] 41-11
- Allen, A.A.**  
Case study: oil recovery beneath ice [1978, p.261-266, eng] 41-2123
- Allen, J.H.**  
Iceberg study, Saglik, Labrador, including cruise report C.S.S. "Dawson", August 7-August 26, 1972 [1973, 92p., eng] 41-3961
- Allen, J.R.L.**  
Dimlington Stadial (Late Devensian) ice-wedge casts and involutions in the Severn Estuary, southwest Britain [1987, p.109-118, eng] 41-4520
- Allen, M.W.**  
Interactive snowcover mapping with geostationary satellite data over the western United States [1986, p.1065-1074, eng] 41-3995
- Allen, R.V.**  
Spatial and temporal snowcover distribution [1984, p.199-203, eng] 41-1960
- Alley, R.B.**  
Deformation of till beneath ice stream B, West Antarctica [1986, p.57-59, eng] 41-1780  
Firn studies at upstream B, West Antarctica [1985, p.65-66, eng] 41-2627  
Grain growth in polar ice: Pts. 1 and 2 [1986, p.415-433, eng] 41-4297  
Seismic measurements reveal a saturated porous layer beneath an active antarctic ice stream [1986, p.54-57, eng] 41-1779  
Texture of polar firn for remote sensing [1987, p.1-4, eng] 41-4426  
Three-dimensional coordination number from two-dimensional measurements: a new method [1986, p.391-396, eng] 41-4294
- Allison, A.**  
Fluctuations of Heard Island glaciers and related climatic changes [1986, p.89-95, 209-214, eng] 41-1059
- Allison, I.**  
ANARE automatic weather station program [1986, p.25-30, eng] 41-1077
- Characteristics of the seasonal sea ice of East Antarctica and comparisons with satellite observations [1987, p.85-91, eng] 41-4441
- Allison, I.F.**  
Recent changes in the glaciers of Heard Island [1986, p.255-271, eng] 41-1020
- Allyn, F.B.**  
Ice effects on arctic offshore structures [1983, p.14-15, eng] 41-788
- Alm, G.**  
Climate and glaciation in Kong Karls Land, eastern Svalbard [1984, p.291-302, eng] 41-2007
- Al'shin, B.I.**  
Comparative specification of engineering thermometers for low temperatures [1986, p.259-262, eng] 41-1407
- Altschaeffl, A.G.**  
Laboratory study of the effectiveness of various admixtures on the attenuation of moisture damage upon various foamed asphalt mixtures [1985, p.104-115, eng] 41-3335
- Al'tshuler, V.M.**  
Mining technology designed for saving mineral resources [1987, 94p., rus] 41-4558
- Al'tshuler, Z.E.**  
Methods of calculating snow transfer volumes in artificial snow accumulation during snowstorms [1986, p.155-160, rus] 41-1660
- Altunin, I.U.S.**  
Temperature regime of rocks surrounding underground excavations of the Kolyma Hydroelectric Power Plant [1985, p.26-29, rus] 41-429
- Alwabbab, R.M.**  
Bond and slip of steel bars in frozen sand [1983, 361p., eng] 41-898
- Amacher, M.C.**  
Retention and release of metals by soils—evaluation of several models [1986, p.131-154, eng] 41-2138
- Ambach, W.**  
Contamination of firn layers by radioactive fission products from atmospheric fallout [1986, p.1173-1176, eng] 41-4360  
Evaluation of strain rate measurements on a 20 m deep firn pit, applying a Newtonian model (Kesselwandferner, Ötztal Alps, 1967-1978) [1984, p.169-176, eng] 41-633  
Measurements of deformation in a firn pit [1985, p.211-222, eng] 41-717  
Nomographs for the determination of meltwater from ice and snow surfaces by sensible and latent heat [1986, p.181-189, eng] 41-4357  
Nomographs for the determination of meltwater from snow and ice surfaces [1986, p.7-15, eng] 41-4358  
Proposal of a constitutive equation of temperate firn [1986, p.1-9, eng] 41-1299  
Rheological properties of temperate firn [1985, p.71-77, eng] 41-4130
- Ambe, Y.**  
Concentrations of trace elements in surface snow in the area near Syowa Station, Antarctica [1986, p.47-55, eng] 41-3657
- American Concrete Institute. ACI Committee 357**  
State-of-the-art report on offshore concrete structures for the Arctic [1985, 117p., eng] 41-82
- Aminova, L.I.**  
Compaction parameters of elastic-clayey grounds underlying low-rise buildings built on fills [1985, p.87-89, rus] 41-318
- Amos, J.**  
Hydrology and water chemistry of glacial meltwater and snowmelt streams in the Jostheim, southern Norway [1985, p.52-60, eng] 41-584
- An, R.**  
Distribution of existing glaciers in the Qaidam Basin [1986, p.171-175, chj] 41-1465
- An, V.V.**  
Mapping frozen strata in troughs of the BAM zone [1986, p.106-113, rus] 41-3491  
Thermal erosion in the Baykal Amur railroad zone [1984, p.35-39, rus] 41-4356
- Anagnostopoulou-Konsta, A.**  
Binding modes of water in plant leaves: a dielectric study [1987, p.119-125, eng] 41-2223
- Anandakrishnan, S.**  
Microearthquakes under and alongside Ice Stream B, Antarctica, detected by a new passive seismic array [1987, p.30-34, eng] 41-4430
- Andersen, P.F.**  
Shore based wave generators for ice management at cold region harbours [1986, p.479-499, eng] 41-1614
- Andersland, B.**  
Flexural behavior of frozen soil [1986, p.355-361, eng] 41-1161
- Andersland, O.B.**  
Analysis of frozen sand beams [1983, p.790-793, eng] 41-2687  
Finite element method for analysis of frozen earth structures [1987, p.121-129, eng] 41-4489  
Research on transportation facilities in cold regions [1986, 105p., eng] 41-639
- Anderson, A.C.**  
Capacitance bridge for low-temperature, high-resolution dielectric measurements [1987, p.130-132, eng] 41-1866

- Anderson, D.M.**  
Subsurface ice and permafrost on Mars [1985, p.565-581, eng] 41-1724
- Anderson, E.A.**  
Snowmelt lysimeter for research applications [1984, p.209-218, eng] 41-1962
- Anderson, I.**  
Evaluation of the international ice patrol drift model [1986, p.387-409, eng] 41-156  
Melting glaciers pull the plug on volcanoes [1987, p.30, eng] 41-2365
- Anderson, J.B.**  
Critical evaluation of some criteria used to infer Antarctica's glacial and climatic history from deep-sea sediments [1986, p.503-505, eng] 41-2800  
Weddell Fan and associated abyssal plain, Antarctica: morphology, sediment processes, and factors influencing sediment supply [1986, p.121-129, eng] 41-1278
- Anderson, J.C.**  
On the use of lake ice conditions to monitor climatic change [1987, 28p. + appends., eng] 41-3424
- Anderson, J.O.**  
Non-resonant acoustic projector (NRAP) for low frequency studies [1985, p.454-459, eng] 41-227
- Anderson, K.O.**  
Applications of a method for evaluation of low temperature tensile properties of asphalt concrete [1987, p.333-366, eng] 41-4028  
Development of a method to evaluate the low temperature tensile properties of asphalt concrete [1986, p.156-189, eng] 41-2204
- Anderson, L.G.**  
Sea ice melt water, a source of alkalinity, calcium and sulfate? Results from the CESAR ice station [1985, p.90-96, eng] 41-592
- Anderson, M.G.**  
Slope stability; geotechnical engineering and geomorphology [1987, 648p., eng] 41-3042
- Anderson, P.J.**  
Observed processes of glacial deposition in Glacier Bay, Alaska [1986, 167p., eng] 41-2974
- Anderson, R.J.**  
Wind stress measurements over rough ice during the 1984 Marginal Ice Zone Experiment [1987, p.6933-6941, eng] 41-4249
- Andersson, L.**  
Ice impacts on semisubmersibles [1987, p.313-320, eng] 41-2438  
Structural safety of semis in sub-Arctic waters [1986, p.540-564, eng] 41-1117
- Andersson, P.**  
Effect of guest molecule size on the thermal conductivity and heat capacity of clathrate hydrates [1983, p.1423-1432, eng] 41-2246
- André, J.C.**  
"LAGO-Katabatic" programme [1986, p.17-18, eng] 41-1074
- André, M.F.**  
Dating slope deposits and estimating rates of rock wall retreat in Northwest Spitsbergen by lichenometry [1986, p.65-75, eng] 41-1846  
Types of evolution and slope dynamics in North Labrador [1985, p.81-94, fre] 41-375
- Anders, E.L.**  
Bulk transfer coefficients for heat and momentum over leads and polynyas [1986, p.1875-1883, eng] 41-2220  
Comment on "Atmospheric boundary layer modification in the marginal ice zone" by T.J. Bennett, Jr. and K. Hunkins [1987, p.3965-3969, eng] 41-3064  
Measurements of refractive index spectra over snow [1986, p.248-260, eng] 41-2984  
New method of measuring the snow-surface temperature [1986, p.139-156, eng] 41-1285  
Small-scale interaction between atmosphere and ocean at Maud Rise [1986, p.67-71, rus] 41-4189  
Theory for the scalar roughness and the scalar transfer coefficients over snow and sea ice [1986, 19p., eng] 41-1263  
Theory for the scalar roughness and the scalar transfer coefficients over snow and sea ice [1987, p.159-184, eng] 41-2364
- Andrews, B.**  
Weddell Fan and associated abyssal plain, Antarctica: morphology, sediment processes, and factors influencing sediment supply [1986, p.121-129, eng] 41-1278
- Andrews, E.D.**  
Persistence in the size distribution of surficial bed material during an extreme snowmelt flood [1986, p.191-197, eng] 41-211
- Andrews, J.T.**  
Inception, growth and decay of the Laurentide Ice Sheet [1987, p.13-15, eng] 41-4096  
Land/ocean correlations during the last interglacial/glacial transition, Baffin Bay, northwestern North Atlantic: a review [1985, p.333-355, eng] 41-2682  
Pollen, vegetation, and climate relationships along the Dalton Highway, Alaska, U.S.A.: a basis for Holocene paleoclimatological and paleoclimatic studies [1986, p.57-72, eng] 41-1188
- Andrianov, V.N.**  
Cryogenic-inversion ridges of northwestern Siberia [1986, p.128-132, rus] 41-2829
- Andrienko, V.G.**  
Icebreakers of the Lake Baykal ferry-boat crossing [1987, p.284-301, rus] 41-4149
- Andrzejewski, L.**  
Evolution of marginal zone of the Vitkovski Glacier (South Spitsbergen) [1985, p.527-535, eng] 41-75
- Angel, M.V.**  
Marine processes [1987, p.50-74, eng] 41-3233
- Angeloni, L.A.**  
Geological literature of the Alaska Peninsula to 1985 [1986, 113p., eng] 41-957
- Anikanov, K.A.**  
Using dry, low-cement, rolled concrete mix for construction of the Kureyskaya hydroelectric power plant [1986, p.31-35, rus] 41-2867
- Anikina, V.S.**  
Forecasting sustained strength of loess soils from numerical modeling of their structure [1986, p.34-42, rus] 41-3394
- Anisimov, V.A.**  
Experience in designing earth dams on permafrost (the case of the Magadan region) [1986, p.183-189, rus] 41-3461
- Aniskovich, V.M.**  
Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band [1986, p.29-42, eng] 41-2207
- Aniya, M.**  
Aerial surveys over the Patagonia Icefields [1987, p.157-161, eng] 41-3841  
Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield [1987, p.133-140, eng] 41-3838  
Glacier variations and their causes in the northern Patagonia icefield, Chile, since 1944 [1986, p.307-316, eng] 41-1178  
Mapping structure and morphology of Soler Glacier, Chile, using vertical aerial photographs [1986, p.8-10, eng] 41-729  
Moraine formation at Soler Glacier, Patagonia [1987, p.107-117, eng] 41-3835  
Structural and morphological characteristics of Soler Glacier, Patagonia [1987, p.69-77, eng] 41-3829
- Anno, Y.**  
Conversion of a low-speed wind tunnel to a snowdrift wind tunnel [1986, p.291-294, eng] 41-1296  
One more froude number paradox [1987, p.307, eng] 41-3040  
Snow deflector built at the edge of a road cut [1986, p.121-129, eng] 41-1283
- Antarctic docking facility study carried out by Han-Padron Associates**  
Antarctic docking facility study carried out by Han-Padron Associates [1986, n.p., eng] 41-214
- Antenna towers and antenna-supporting structures**  
Antenna towers and antenna-supporting structures [1981, 65p., eng] 41-493
- Anti-icing and deicing-defrosting fluids**  
Anti-icing and deicing-defrosting fluids [1985, 13p., eng] 41-1762
- Antipina, G.S.**  
Development of soil algae in felled areas of northern taiga [1986, p.794-798, rus] 41-1004  
Soil algae of pine forests and felled areas in Northern Karelia [1986, p.182-189, rus] 41-2380
- Antonenko, G.V.**  
Basic problems of power supply in the North [1986, p.86-93, rus] 41-1205
- Antonova, E.V.**  
Thermally insulated pipes for construction of industrial over-ground engineering nets [1986, p.28-29, rus] 41-2781
- Anzaki, Y.**  
Improvement of asphalt pavement durability by surface treatment of coarse aggregates [1987, p.619-636, eng] 41-4038  
New development in Japan's pavement management process [1987, p.917-948, eng] 41-4048  
Present situation and evaluation of *in-situ* surface and base recycling [1987, p.773-811, eng] 41-4043
- Aoki, K.**  
Study of the melting process in ice-air composite materials (in the case where a temperature gradient exists in porous materials) [1986, p.2138-2144, eng] 41-532
- Aoki, Y.**  
Under-snow rad. r using multifrequency holography [1986, p.111-118, eng] 41-853
- Aota, M.**  
Distribution of pack ice off Okhotsk Sea coast of Hokkaido observed with sea ice radar network, January-April, 1986 [1986, p.25-50, jpn] 41-3504  
Observation of the surface roughness of sea ice using an X-band radar [1986, p.45-58, jpn] 41-3879
- Apekis, L.**  
Binding modes of water in plant leaves: a dielectric study [1987, p.119-125, eng] 41-2227  
Multiplicity of dielectric relaxation times of dispersed ice microcrystals [1987, p.195-211, eng] 41-4361
- Appel', I.L.**  
Numerical modeling of annual cycle of ice cover evolution and seasonal forecasts of ice redistribution in the Soviet Arctic seas [1986, p.71-77, rus] 41-4198
- Applegate, M.S.**  
Radar backscatter from land, sea, rain and snow at millimeter wave length [1985, p.250-254, eng] 41-1360
- Araki, Y.**  
Nucleation mechanism of ice crystals under electrical effect [1986, p.502-508, eng] 41-2105
- Aranzon, M.I.**  
Determining servomechanism parameters of drop-wedge percussive machines [1978, p.36-41, rus] 41-1317  
Energy distribution of drop-wedge percussive machines with servomechanism [1978, p.41-47, rus] 41-1318
- Archegova, I.B.**  
Current problems in humus formation [1986, 172p., rus] 41-4563
- Arcone, S.A.**  
Microwave dielectric, structural, and salinity properties of simulated sea ice [1986, p.832-839, eng] 41-2297  
Model studies of surface noise interference in ground-probing radar [1985, 23p., eng] 41-447  
Morphology, hydraulics and sediment transport of an ice-covered river. Field techniques and initial data [1986, 37p., eng] 41-2612  
Short-pulse radar investigations of freshwater ice sheets and brash ice [1986, 10p., eng] 41-594  
Structure and dielectric properties at 4.8 and 9.5 GHz of saline ice [1986, p.14,281-14,303, eng] 41-1857
- Arctic Environmental Information and Data Center**  
Catalog of microfiche of Alaska natural resource and environmental materials [1986, 167p., eng] 41-965
- Arctic Heritage Symposium, Banff, Alberta, August 24-28, 1985**  
Proceedings [1987, 653p., eng] 41-3232
- Arctic Science Conference (Alaska Science Conference, 35th), Anchorage, Alaska, Oct. 2-5, 1984**  
Science and public policy: program and abstracts of the conference [1984, 251p., eng] 41-3615
- Arctic shipping**  
Arctic shipping [1986, p.17-29, eng] 41-567
- Ardal, J.L., Jr.**  
Recent advance of the Ross Ice Shelf, Antarctica [1986, p.464-474, eng] 41-4302
- Ardouin, B.**  
Long-range transport of continental radon in subantarctic and antarctic areas [1986, p.178-189, eng] 41-1750
- Are, A.L.**  
Moisture redistribution in the snow cover of Central Yakutia [1986, p.104-107, rus] 41-115
- Arefeva, E.M.**  
Evaluating the state of gas pipelines from space photographs [1986, p.27-29, rus] 41-3212
- Argal, E.S.**  
Making concrete dams monolithic by cementing structural joints [1987, 119p., rus] 41-4150
- Argue, G.**  
Cold climate performance of Canadian airport pavements [1987, p.303-332, eng] 41-4027
- Argue, G.H.**  
Measurement and maintenance of runway friction at Canadian airfields [1987, p.949-979, eng] 41-4049
- Argunov, L.I.**  
Depth of sinking power-line support foundations [1984, p.11-13, rus] 41-1831
- Arikainen, A.**  
Tiksi moves through ice [1986, p.42-45, rus] 41-3204
- Arkhangelov, A.A.**  
Chronostratigraphy of syngenetic permafrost deposits by oxygen-isotope analysis [1986, p.415-417, rus] 41-2307  
Possibilities of oxygen-isotope technique in studying ground ice [1986, p.88-92, rus] 41-111
- Armand, A.D.**  
Change of vegetation near the timber-line [1985, p.59-62, eng] 41-373
- Armando, E.**  
Peat formation of the Rutor Glacier (Aosta Valley). Results obtained by palynostratigraphic study of new peat outcrops near the glacier snout [1985, p.144-149, ita] 41-3182
- Armour, R.**  
Design and operation of the Arctic Ivik, a new Arctic class II vessel for the Beaufort Sea [1986, p.244-256, eng] 41-2030
- Armstrong, T.**  
Northern sea route, 1986 [1987, p.585-590, eng] 41-3857
- Armstrong, T.P.**  
Nitrate variability in South Pole and Ross Ice Shelf snow and firn [1985, p.68-69, eng] 41-2629
- Arnason, B.**  
Use of deuterium to trace the origin of drifting sea ice [1985, p.85-89, eng] 41-591
- Arnborg, L.**  
Riverbank erosion in the Colville Delta, Alaska [1987, p.61-70, eng] 41-3555
- Arnholdt, D.A.**  
Sloped roof snow loads using simulation [1987, p.1820-1833, eng] 41-4173

- Arnold, C.E.**  
Thermal resistance measurements of a well-insulated wall using a calibrated hot box [1986, p.957-973, eng] 41-1389
- Arnold, J.R.**  
*In situ* H-3, C-14, and Be-10 for determining the net accumulation and ablation rates for ice sheets [1987, p.4947-4952, eng] 41-3343
- Arnapolin, A.G.**  
Construction of electric power lines for main pipelines. Manual [1986, 164p. (Pertinent p.127-138), rus] 41-2890
- Arockiasamy, M.**  
Analysis of gravity platform foundations using F.E.M. with stochastic materials [1986, p.127-135, eng] 41-358  
Bergy-bit motion due to wind, wave, current and Coriolis forces [1984, p.182-198, eng] 41-1959  
Response of offshore structures to bergy-bit and iceberg impacts [1985, p.951-961, eng] 41-671
- Artemova, N.L.**  
Mineralogy and morphology of disperse morainial debris on King George and Nelson islands [1984, p.104-110, rus] 41-2358
- Artificial islands**  
Artificial islands [1986, p.47, 50, eng] 41-241
- Arunchalam, V.M.**  
Review of interaction of icebergs with offshore structures [1985, p.693-704, eng] 41-668  
Short term motion analysis of icebergs in linear waves [1987, p.247-258, eng] 41-3036
- Asai, S.**  
Countermeasures against damage by snowfall on transmission line in Hokkaido District [1985, p.26-27, jpn] 41-183
- Asce, M.**  
River wave response to the friction-inertia balance [1987, p.764-769, eng] 41-4222
- Aseev, V.V.**  
Natural water bodies as indicators of landscapes [1986, p.75-80, rus] 41-1369
- Aseeva, I.V.**  
Human activities impact on the biological activity of mountain soils [1986, p.41-45, rus] 41-456
- ASHRAE/DOE/BTECC Conference (on) Thermal Performance of the Exterior Envelopes of Buildings, 3rd, Clearwater Beach, FL, Dec. 2-5, 1985**  
Thermal performance of the exterior envelopes of buildings; Proceedings [1986, 1422p., eng] 41-1376
- Ashton, G.D.**  
River and lake ice engineering [1986, 485p., eng] 41-231
- Ashworth, P.J.**  
Interrelationships of channel processes, changes and sediments in a proglacial braided river [1986, p.361-371, eng] 41-3566
- Asmus, V.V.**  
Cluster analysis of airborne-radar images of ice covers [1986, p.64-72, rus] 41-2718  
Digital processing of radar images obtained from the satellite "Kosmos-1500" [1986, p.37-57, rus] 41-2716
- Astakhov, V.I.**  
Geologic conditions of the burial of Pleistocene glacier ice in the Yenisey River area [1986, p.72-78, rus] 41-108  
Geological conditions for the burial of Pleistocene glacier ice on the Yenisey [1986, p.286-295, eng] 41-3619  
On the techniques of geological interpretation of space images of covered regions. (An answer to the I.L. Kuzin paper "On errors in the geological interpretation of space images of West Siberia") [1984, p.443-451, eng] 41-821
- Astratov, M.I.U.**  
Variation of sulfate content in Arctic atmospheric precipitation during the last 90 years [1986, p.38-42, eng] 41-1690
- Atkin, A.S.**  
Estimating the productivity of stands in the lower Angara River area [1983, p.47-52, rus] 41-2747  
Structural-functional interrelationships and productivity of phytocenoses [1983, 140p., rus] 41-2746
- Atkins, A.G.**  
Scaling in ice fracture mechanics: non-proportionately scaled and non-linear behaviour [1986, p.67-73, eng] 41-1583
- Atkins, R.T.**  
*In-situ* thermal conductivity measurements [1983, 38p., eng] 41-4070
- Atlar, M.**  
Towards the understanding of steady tilt phenomenon in semi-submersibles [1987, p.139-149, eng] 41-2415
- Atlas, D.**  
Estimating ocean-air heat fluxes during cold air outbreaks by satellite [1981, 48p., eng] 41-2527
- Atlas, R.M.**  
Fate of petroleum pollutants in Arctic ecosystems [1986, p.59-67, eng] 41-345
- Attanasio, D.**  
Structural information from ENDOR spectroscopy: the frozen solution proton spectra of some VO(II) complexes [1986, p.4952-4957, eng] 41-2106
- Attwood, D.R.**  
Iceberg stability—an error analysis [1986, p.49-55, eng] 41-1303
- Au, M.C.**  
Transient effects in low temperature induced failure and fracture initiation in a pavement structure [1987, p.277-301, eng] 41-4026
- Aughenbaugh, N.B.**  
Stability study of CRREL permafrost tunnel [1986, p.777-790, eng] 41-230
- Auracher, H.**  
Heat transfer in frost and snow [1978, p.25-30, eng] 41-466
- Austin, K.G.**  
Radiocarbon chronology of the last glaciation in McMurdo Sound, Antarctica [1985, p.59-61, eng] 41-2625
- Aver'lanov, V.G.**  
Antarctic ice sheet studies: results and plans [1984, p.79-85, rus] 41-2356  
Problems in glacier-climatic studies in Antarctica [1986, p.86-91, eng] 41-3952
- Ayers, G.P.**  
Methanesulphonate in antarctic ice [1986, p.375-379, eng] 41-2503
- Azieva, E.E.**  
Peculiarities of microbe associations in the Far North and Pamir highlands [1986, p.12-13, rus] 41-3540
- Az'muka, T.I.**  
Soil climate in southeastern West Siberia [1984, p.26-31, rus] 41-4088
- Babello, V.A.**  
Distribution of stresses and strains in sandy bases of rigid stamps [1985, p.100-103, rus] 41-325  
Operation of outdoor distribution systems in Chita City under frost heave conditions [1985, p.26-28, rus] 41-287
- Bab'eva, I.P.**  
Peculiarities of microbe associations in the Far North and Pamir highlands [1986, p.12-13, rus] 41-3540
- Babolian, R.**  
Chemistry of the automotive environment [1978, p.14-23, eng] 41-380
- Bachtel, F.**  
Thermal environment around the Space Shuttle with hot-gas jets for ice suppression [1986, p.547-553, eng] 41-2738
- Bachurin, G.V.**  
Hydrologic investigations of landscapes [1986, 208p., rus] 41-1365
- Bad'ianova, L.I.**  
Deformation properties of washed-up sands under permafrost conditions [1986, p.157-165, rus] 41-2835
- Badratnina, L.G.**  
Stability of a plane crystallization front moving at constant velocity [1983, p.388-394, eng] 41-4613
- Badu-Tweneboah, K.**  
Factors affecting the cracking of asphalt concrete pavements [1986, p.96-109, eng] 41-2202
- Baeva, R.I.**  
Changes in chemical composition of meltwater in areas of intensive human activities [1986, p.60-68, rus] 41-3210
- Bagchi, B.**  
Debye-Waller factor of the solid from the self-diffusion coefficient at the solid-liquid interface [1986, p.4667-4668, eng] 41-1440
- Bagher, D.H.**  
Ice formation in hardened cement paste. Part 1. Room temperature cured pastes with variable moisture contents [1986, p.709-720, eng] 41-1998  
Ice formation in hardened cement paste. Part 2. Drying and resaturation on room temperature cured pastes [1986, p.835-844, eng] 41-2000  
Ice formation in hardened cement paste, Pt.3. Slow resaturation of room temperature cured pastes [1987, p.1-11, eng] 41-2895
- Baggeroer, A.B.**  
Acoustic array sensor tracking system [1985, p.464-471, eng] 41-229  
Ocean dynamics and acoustic fluctuations in the Fram Strait marginal ice zone [1987, p.435-436, eng] 41-2805  
Science program of the FRAM experiments in the Eastern Arctic Ocean [1985, p.420-428, eng] 41-221
- Bagov, M.M.**  
Devices for measuring snow avalanche velocities [1985, p.22-30, rus] 41-840  
Methods of measuring elastic wave parameters in snow samples [1985, p.7-14, rus] 41-838
- Bagriantsev, N.V.**  
Estimate of number of icebergs in the southern ocean [1986, p.85-87, rus] 41-4191  
Southern ocean thermohaline water stratification according to ice cover data of the "Weddell-POLEX-81" expedition [1986, p.18-27, rus] 41-4183
- Bahmanyar, G.H.**  
Study of buried-pipe failures in cold climates [1982, 205p., eng] 41-900
- Baiano, G.**  
Winter maintenance of urban roads with high traffic performance [1986, p.57-61, ita] 41-2232
- Balnikov, E.V.**  
Modeling tundra populations and communities [1986, p.207-219, rus] 41-548
- Bain, M.**  
Ice deposit characteristics versus meteorological parameters from mountain top measurements and comparisons with a numerical investigation [1984, p.733-736, eng] 41-4414  
Role of ice crystals on ice accretion processes [1984, p.737-740, eng] 41-4415
- Balta, V.A.**  
Modification of bottle bathometer for studying bacterioplankton at shallow depths [1986, p.53-55, rus] 41-2389
- Baltenov, M.S.**  
High altitude flora of northern Tien Shan [1985, 231p., rus] 41-551
- Bakalchuk, V.**  
Rheological model for ice dynamics [1986, p.137-146, eng] 41-1589
- Bakenov, B.B.**  
Engineering and geological investigations of saline soils [1986, 245p., rus] 41-996
- Baker, D.N.**  
Arctic ship technology: the state of the art—1986 [1987, 91p., eng] 41-4582  
Ice strength indexer for model towing tanks [1986, 40p. + append., 12p., eng] 41-964  
Indexer: a device for measuring the resistance of ice models in a test channel [1986, 15p., fre] 41-3244
- Baker, G.C.**  
Measurements of the linear thermal expansion coefficients of asphalt pavement at low temperatures [1986, p.299-301, eng] 41-1298
- Baker, J.M.**  
Marine processes [1987, p.50-74, eng] 41-3233
- Baker, L., Jr.**  
On free convection melting of a solid immersed in a hot dissimilar fluid [1986, p.1087-1093, eng] 41-393
- Baker, M.B., Jr.**  
Supercritical flume for measuring sediment-laden streamflow [1986, p.847-851, eng] 41-3138
- Baker, M.J.**  
Complementary modes of air/ground transport mechanisms in Antarctic logistics support [1986, p.376-419, eng] 41-2037
- Baker, P.C.**  
Ice accretion on cables of various cross-sections [1986, p.11-28, eng] 41-3796
- Baker, T.H.W.**  
Application of time-domain reflectometry to determine the thickness of the frozen zone in soils [1982, 8p., eng] 41-3228  
Ground freezing '85—a summary [1987, p.301-306, eng] 41-3039
- Baker, V.R.**  
Cataclysmic Late Pleistocene flooding from glacial Lake Missoula: a review [1985, p.1-41, eng] 41-2683
- Bakhanov, V.P.**  
Numerical simulation of the evolution of seeded supercooled stratiform clouds [1986, p.26-41, rus] 41-3670  
Study of turbulent transfer in stratiform clouds and artificial crystallization zones [1984, p.719-722, eng] 41-4413
- Bakhanova, R.A.**  
Structural anomalies in ice-forming silver iodide aerosols [1986, p.97-99, rus] 41-1454
- Bakhvalova, T.I.U.**  
Stresses in impervious screens induced by waves and adhered ice [1985, p.33-38, rus] 41-432
- Bakov, E.K.**  
Water resources of the Sary-Dzhaz river basin [1986, p.3-11, rus] 41-3806
- Balabaev, I.U.M.**  
Special load lifter for installing 1150 kV overhead lines [1986, p.23-25, rus] 41-1921
- Balaeva, V.A.**  
Calculating runoff hydrograph for the Marukh mountain-glacier basin, Caucasus [1986, p.69-74, 182-186, rus] 41-4343
- Reconstruction of environmental conditions of the north slope glaciers of the Terskey Ala-Tau Range from dendrologic data [1987, p.235-242, rus] 41-4153**
- Balaguru, P.**  
Durability of concrete containing cement kiln dust [1987, p.305-321, eng] 41-3696  
Freeze-thaw resistance of polymer modified concrete [1987, p.863-876, eng] 41-3710
- Balandin, R.K.**  
Glacial giants. History of origin, existence and deterioration of great glaciers [1986, 175p., rus] 41-2252
- Baldassari, D.**  
Influence of surface conditions on surface temperature [1986, p.1-15, eng] 41-640
- Baldridge, J.E.**  
Ecological values along the North Slope portion of the Haul Road [1978, 40p., eng] 41-2076
- Baldwin, J.**  
Probabilistic theories for the failure of sea ice [1986, p.37-54, eng] 41-1581
- Baldwin, J.T.**  
Explicit technique for calculating first year ice loads on structures [1987, p.267-272, eng] 41-2431



- Some statistical issues in the analysis of global ice loads (1987, p.357-364, eng) 41-2443
- Bales, S.L.**  
Degradation of surface ship operations in arctic/cold weather environments (1986, p.223-237, eng) 41-935
- Balashnikov, G.G.**  
Organization of earthwork for quarrying, melioration, and placing cohesive ground into impervious elements of the river-bed and left-side dams of the Kureyskaya hydroelectric power plant (1986, p.45-49, rus) 41-2868  
Using frozen ground in the construction of dams in the northern construction-climatic zone (1986, p.128-141, rus) 41-3456
- Balinskii, B.V.**  
Improving coal mining technology by using "Sputnik" supports in the Sangarskaya mine (1986, p.30-33, rus) 41-4552
- Baliura, M.V.**  
Construction of low-rise buildings on seasonally freezing gravelly grounds (1985, p.30-32, rus) 41-289
- Ballantyne, C.K.**  
Studies on a glifluction lobe: Jotunheimen, Norway: C-14 chronology, stratigraphy, sedimentology and palaeoenvironment (1986, p.345-360, eng) 41-3565
- Balzaret, P.**  
Enigma of avalanche protection structures (1986, p.38-43, ita) 41-2236
- Bamber, J.L.**  
Internal reflecting horizons in Spitsbergen glaciers (1987, p.5-10, eng) 41-4427
- Banach, M.**  
Origin and evolution of Goes Lake, Spitsbergen (1986, p.122-124, 233-234, rus) 41-4355
- Bandimere, S.W.**  
Grouting in difficult soil and weather conditions (1987, p.84-94, eng) 41-3888
- Bandopadhyay, S.**  
Simulation of a multi-seam dragline operation in a sub-arctic mine (1986, p.47-54, eng) 41-1027
- Bar-Nun, A.**  
Amorphous water ice and its ability to trap gases (1987, p.2427-2435, eng) 41-3575  
Sputtering of water ice at 30-140 K by 0.5-6.0 keV H(+) and Ne(+) ions (1985, p.287-299, eng) 41-1708
- Baranov, A.T.**  
Frost resistance criteria of cellular, autoclave-hardened concretes (1986, p.31-32, rus) 41-1884
- Baranov, N.N.**  
Ultimate masses of large-size blocks transported by draw-plates and pneumatic rollers (1986, p.13-14, rus) 41-2780
- Barashkova, N.K.**  
Conditions conducive to glacial mudflow in the Aktru River valley, Altai Mountains, June 24, 1984 (1986, p.121-124, rus) 41-1651
- Barbero, R.S.**  
Development of a satellite remote sensing technique for the study of alpine glaciers (1987, p.203-215, eng) 41-2763
- Barclay, D.D.**  
Guide for extreme cold weather operations (1986, p.450p., eng) 41-2483
- Barduhn, A.J.**  
Effect of natural convection on ice crystal growth rates in salt solutions (1985, p.747-752, eng) 41-2333
- Barkov, N.I.**  
Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core (1987, p.318-321, eng) 41-2505  
Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP (1987, p.1197-1202, eng) 41-4603
- Barnes, C.E.**  
X-ray-induced transient attenuation at low temperatures in polymer clad silica (PCS) fibers (1981, p.25-34, eng) 41-580
- Barnes, C.R.**  
Spatial and temporal snowcover distribution (1984, p.199-203, eng) 41-1960
- Barnes, J.C.**  
Comparative analysis of sea ice features using side-looking airborne radar (SLAR) and Landsat imagery (1981, 66p., eng) 41-4158  
Comparison of theoretical and actual satellite microwave brightness temperatures to determine snowpack properties (1981, 85p., eng) 41-2528
- Barnes, P.W.**  
1985 field studies, Beaufort and Chukchi Seas, conducted from the NOAA ship *Discoverer* (1986, 57p. + figs., eng) 41-831  
Anchor ice and bottom-freezing in high-latitude marine sedimentary environments: observations from the Alaskan Beaufort Sea (1986, 21p., eng) 41-1209  
Beaufort Sea coastal currents: a divergence near Barter Island, Alaska? (1987, p.139-142, eng) 41-3468  
Ice-gouge studies, Alaskan Beaufort Sea (1986, p.41-50, eng) 41-3090  
Morphologic studies of the Wilkes Land continental shelf, Antarctica—glacial and iceberg effects (1987, p.175-194, eng) 41-4545
- Barnette, J.A.**  
Pipeline codes and structural criteria for pipelines in Arctic and earthquake regions (1987, p.89-97, eng) 41-4629
- Barney, W.S.**  
National aircraft icing technology plan (1986, 47p. + append., eng) 41-478
- Barr, D.**  
Archive of the ice record from Knob Lake, Quebec, 1954 to present (1985, p.284-289, eng) 41-1506
- Barr, R.S.**  
Freezing temperatures of water, alkanolic acids and their mixtures (1986, p.79-86, eng) 41-2017
- Barr, W.**  
*Earl Gray: a name to live up to* (1987, p.593-596, eng) 41-3858
- Barrick, D.E.**  
HF radar observations of Arctic pack-ice breakup (1986, p.270-275, eng) 41-1509
- Barrie, J.V.**  
Grand Bank pits: description and postulated origin (1986, p.73-77, eng) 41-3094
- Barrie, L.A.**  
Air chemistry observations in the Canadian Arctic (1986, p.97-107, eng) 41-348  
Arctic air pollution: an overview of current knowledge (1986, p.643-663, eng) 41-828
- Barry, P.J.**  
Water chemistry during snowmelt in a northern basin (1984, p.137-155, eng) 41-3321
- Barry, R.G.**  
Aspects of the meteorology of the seasonal sea ice zone (1986, p.993-1020, eng) 41-3001  
Cryospheric data management: system for special sensor microwave imager DMSF data (1985, p.411-415, eng) 41-219  
Nature and significance of cloud-cryosphere interactions in the marginal snow and ice zones (1984, p.605-607, eng) 41-2009  
Possible CO<sub>2</sub>-induced warming effects on the cryosphere (1984, p.571-604, eng) 41-1973  
Sea ice data base (1986, p.1099-1134, eng) 41-3003
- Barsch, D.**  
New data on the relief development of the South Shetland Islands, Antarctica (1986, p.211-218, eng) 41-1279
- Barton, C.C.**  
Microstructure and the resistance of rock to tensile fracture (1985, p.11,533-11,546, eng) 41-496
- Bartsch-Winkler, S.**  
Geologic studies in Alaska by the U.S. Geological Survey during 1985 (1986, 173p., eng) 41-664
- Barua, S.**  
Design methods for gas/condensate pipelines in cold environments (1986, p.143-151, eng) 41-79
- Basalygin, G.M.**  
Modeling the dynamics of the elastically-inertial system: GTZA (Main turbogear assembly)-shaft line-propeller, during its interaction with ice (1984, p.52-60, rus) 41-555  
Modeling the reduction-gear dynamics of main turbogear assemblies on ice-navigating ships, allowing for gaps in toothings (1986, p.39-48, rus) 41-3389
- Bashkova, L.E.**  
Possibility of forecasting the intensity of ice accretion (1986, p.58-67, rus) 41-2638
- Bass, D.**  
Iceberg crater chains and scour up- and downslope (1986, p.122-128, eng) 41-3100
- Bass, D.W.**  
Added mass and damping coefficient for certain 'realistic' iceberg models (1986, p.163-174, eng) 41-1287  
Hydrodynamic forces and iceberg stability (1986, p.60-62, eng) 41-3092  
Iceberg stability—an error analysis (1986, p.49-55, eng) 41-1303
- Batalin, I.U.P.**  
Modular construction of oil and gas industry objects. Manual (1986, 576p., rus) 41-1746
- Bates, R.E.**  
Meteorological and snow cover measurements at Grayling, Michigan (1985, p.212-229, eng) 41-1497
- Batsikh, I.U.M.**  
Computerized simulation of fleet performance in the Arctic (1985, p.48-53, rus) 41-489
- Batson, G.**  
Multi-year experience of remote sensing of ice thickness on the St. Lawrence River (1984, p.86-100, eng) 41-1950
- Batson, G.B.**  
Field investigation of St. Lawrence River hanging ice dams, winter of 1983-84 (1984, 85p., eng) 41-1669
- Battan, L.J.**  
Technique for measuring the rotational properties of falling oblate ice spheroids (1985, p.665-666, eng) 41-3217
- Battistini, R.**  
Hydroolithosphere and problems of subsurface ice in the equatorial zone of Mars (1985, p.607-617, eng) 41-1726
- Battistoni, R.**  
Snow emergency: vehicles occasionally equipped with a snow removal blade (1987, p.21-25, ita) 41-4102
- Battjes, J.A.**  
Behaviour of offshore structures; Proceedings (1985, 1012p., eng) 41-665
- Baudais, D.J.**  
Drilling of a well from a sprayed floating ice platform Cape Allison C-47 (1987, p.9-16, eng) 41-2396  
Drilling rig transportation in the Canadian arctic islands (1986, p.420-451, eng) 41-2038
- Bauer, C.F.**  
Investigations of riming and snowflake electrification in stratiform clouds (1982, p.568-569, eng) 41-68
- Baumann, M.E.M.**  
Phytoplankton biomass and productivity in the marginal ice zone of the Fram Strait during summer 1984 (1987, p.6777-6786, eng) 41-4237
- Baumgartner, M.F.**  
Large-area deterministic simulation of natural runoff from snowmelt based on Landsat MSS data (1986, p.1013-1017, eng) 41-2303  
Snow cover mapping for runoff simulations based on Landsat-MSS data in an alpine basin (1986, p.191-199, eng) 41-3897
- Bauwens, W.**  
Snowmelt simulation of short living snowpacks (1985, p.139-155, eng) 41-1491
- Bayer, J.**  
Roof blisters. Physical fitness building, Fort Lee, Virginia (1986, 15p., eng) 41-2611
- Bayly, I.**  
Analysis of extreme ice loads measured on USCGC *Polar Sea* (1984, p.241-252, eng) 41-874
- Bayly, I.M.**  
MV *Robert LeMeur* ice/propeller interaction project: full-scale data (1986, p.301-319, eng) 41-2285
- Bazavlik, V.A.**  
Methods of estimating the amount of heat, from scattered radiation of the sky, reaching the surface of roads built at different depths in quarries of Yakutia (1986, p.192-200, rus) 41-2100
- Bazhev, A.B.**  
Meltwater seepage on temperate and cold glaciers (1986, p.50-55, 165-170, rus) 41-4339
- Bazilevich, N.I.**  
Biological productivity of soil and plant formations in the USSR (1986, p.49-67, rus) 41-1822
- Bazzaev, T.V.**  
Heterogeneous nucleation of ice on aerosol nuclei with modified surfaces (1986, p.119-128, rus) 41-1903
- Bea, R.G.**  
Engineering aspects of ice gouging (1986, p.18-28, eng) 41-3088  
Mat foundations for offshore structures in Arctic regions (1987, 146p., eng) 41-3029
- Beach, W.G.**  
Cold set concrete (1986, 12p. + 53 figs., eng) 41-523
- Bealey, M.**  
Durability considerations—precast concrete pipe (1987, p.493-508, eng) 41-3699
- Beardmore, C.**  
Winter weather records relating to potential frost failure of brickwork (1987, p.7-8, eng) 41-3801
- Beaudet, H.**  
Residual snow cover in the Canadian Arctic in July: a means to evaluate the regional maximum snow depth in winter (1986, p.309-315, eng) 41-2689
- Beaudoin, C.C.**  
Laboratory study of the effectiveness of various admixtures on the attenuation of moisture damage upon various foamed asphalt mixtures (1985, p.104-115, eng) 41-3335
- Beaudoin, J.J.**  
Polymer modified concrete (1985, 4p., eng) 41-1940
- Beck, E.**  
Snow and avalanches in the Davos region (1986, p.29-44, ger) 41-2291
- Becker, P.**  
High-frequency ice floe collisions in the Greenland Sea during the 1984 Marginal Ice Zone Experiment (1987, p.7071-7084, eng) 41-4262
- Bédard, Y.**  
Dynamics and mass balance of NO<sub>3</sub> anion and SO<sub>4</sub>(2) anion in meltwater and surface-runoff during spring melt in a boreal forest (1987, p.19-31, eng) 41-4314
- Bedrin, A.G.**  
Formation of a microscopic ice filament in an electric field (1985, p.619-620, eng) 41-2330
- Beeler SooHoo, J.**  
Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microalgal communities (1987, p.165-173, eng) 41-3132
- Beer, H.**  
Experimental investigation of melting of unfixed ice in an isothermal horizontal cylinder (1987, p.155-165, eng) 41-2881  
Prediction and measurement of melting heat transfer to an unfixed phase change material heated in a horizontal concentric annulus (1986, p.1793-1798, eng) 41-3297

- Begot, J.E.**  
Modeling the influence of till rheology on the flow and profile of the lake Michigan lobe, southern Laurentide ice sheet, U.S.A. (1986, p.235-241, eng) 41-684
- Beghi, M.**  
Spectral analysis for the thermomechanical response of solids to low-frequency dynamic loads (1987, p.26-32, eng) 41-2066
- Belval', A.S.**  
Preliminary curing of reinforced concrete bridge structures in heated thermo-forms (1986, p.28-29, rus) 41-1535
- Bekh, I.A.**  
Revegetation of cleared areas in pine forests of southern Priob'e under conditions of increased human activities (1985, p.4-11, rus) 41-3980
- Bel', A.A.**  
Frost resistance of concretes and their structure (1985, p.36-38, rus) 41-417  
New compound admixture for highly frost-resistant poured concretes (1986, p.15-16, rus) 41-879
- Belan, V.I.**  
Field studies of the Neryungri earth dam (1986, p.18-20, rus) 41-1402
- Belikov, I.U.I.**  
Using tractor rippers on frozen grounds (1982, p.40-46, rus) 41-3546
- Belikov, V.P.**  
Recommendations for the factory finishings of new standard house facades for northern towns (1986, 39p., rus) 41-3021
- Belikov, S.E.**  
Reserved zones of Franz Josef Land (1986, p.7-18, rus) 41-3861
- Belinskii, B.V.**  
Evaluation of the influence of natural conditions on performance of motor vehicle transport in the northeastern USSR (1986, p.168-169, rus) 41-3978
- Belitz, H.-J.**  
Meteorological research using a high mast on an antarctic shelf (1987, p.5-10, eng) 41-2844
- Belkin, M.N.**  
Influence of temperature regime on the determination of dates of removing formwork from concrete lining of tunnels (1987, p.63-67, rus) 41-3809
- Bell, B.G.**  
Bryophytes on Bouvetøya (1986, p.11-22, eng) 41-917
- Bell, T.**  
Acoustic survey and glacial history of Adams Lake, outer Nachvak Fiord, northern Labrador (1987, p.101-110, eng) 41-4011
- Beltoni, S.**  
Climatic parameters and glacial fluctuations in the period 1950-1982 (1985, p.97-123, ita) 41-3179  
Problems and indications for a new inventory of Italian glaciers based on comparison between the Italian Inventory of 1959-62 and the World Glacier Inventory (1985, p.166-181, ita) 41-3185
- Belopukhova, E.B.**  
Allowing for the most recent tectonics in geocryological mapping of western Siberia (1986, p.67-78, rus) 41-3487  
Influence of neotectonics on the development of cryogenic formations (1986, p.103-115, rus) 41-2826  
Positive forms of mesorelief as the result of ground ice formation (1986, p.296-302, eng) 41-3620  
Positive microrrelief forms as a result of underground ice formation (1986, p.84-88, rus) 41-110
- Belousova, N.A.**  
Structure and dynamics of forest landscapes in Karelia (1985, 184p., rus) 41-189
- Belov, A.B.**  
Interaction of pressure ridges with cylindrical supports of hydraulic structures (1986, p.34-37, rus) 41-2710
- Belov, A.V.**  
Regionalization of the BAM zone on the basis of quantitative analysis of vegetation maps (1985, 181p., rus) 41-252
- Belov, L.F.**  
Polymer-concrete supports of power lines (1985, p.41-50, rus) 41-1544
- Belozorov, V.**  
Operation of technical equipment in freezing weather (1987, p.78-80, rus) 41-3933
- Beltsos, S.**  
River ice jams: theory, case studies, and applications (1987, p.241-255, eng) 41-2243
- Belte, D.**  
Helicopter Icing Spray System (HISS) evaluation and improvements (1986, 148p., eng) 41-454
- Benard, C.**  
Moving boundary problem: heat conduction in the solid phase of a phase-change material during melting driven by natural convection in the liquid (1986, p.1669-1681, eng) 41-2065
- Benedict, J.B.**  
Arapaho rock glacier, Front Range, Colorado, U.S.A.: a 25-year resurvey (1986, p.349-352, eng) 41-1182
- Benedict, R.J.**  
Arapaho rock glacier, Front Range, Colorado, U.S.A.: a 25-year resurvey (1986, p.349-352, eng) 41-1182
- Benest, D.**  
Ices in the solar system; proceedings of the workshop, 1984 (1985, 954p., eng) 41-1693
- Bengtsson, L.**  
Dispersion in ice-covered lakes (1986, p.151-170, eng) 41-4516  
Influence of withdrawal of heat on the circulation and the thermal regime of ice covered lakes (1982, p.3-16, swe) 41-2854  
Spatial variability of lake ice covers (1986, p.113-121, eng) 41-1848
- Benit, J.**  
Erosion of ices by ion irradiation (1987, p.838-842, eng) 41-4330
- Benner, D.A.**  
Polar statistics and prediction models—application to operational sea ice forecasting (1986, p.193-206, eng) 41-2659
- Bennett, F.L.**  
Winter highway construction (1986, p.32-46, eng) 41-642
- Bennett, T.J., Jr.**  
Atmospheric boundary layer modification in the marginal ice zone (1986, p.13,033-13,044, eng) 41-1861
- Benninghoff, W.S.**  
Antarctic ecosystem (1987, p.9-14, eng) 41-3739
- Benoit, J.R.**  
Ice and ice management on the Grand Bank (1986, p.561-582, eng) 41-167
- Benson, C.**  
Effects of glaciers on runoff and runoff forecasting (1986, p.6-32, eng) 41-472  
Effects of the 1966-68 eruptions of Mount Redoubt on the flow of Drift Glacier, Alaska, U.S.A. (1986, p.355-362, eng) 41-4288  
Final report (1986, 106p. + 3 appenda., eng) 41-471  
Ice problems associated with rivers and reservoirs (1986, p.70-98, eng) 41-475  
Permafrost (1986, p.99-106, eng) 41-476
- Benson, C.S.**  
Application of photogrammetry to the study of volcano-glacier interactions on Mount Wrangell, Alaska (1986, p.813-827, eng) 41-2742  
Influence of internal accumulation and the formation of conglaciation ice on mass balance of the McCall glacier, Alaska (1986, p.40-49, 157-165, rus) 41-4338
- Bentley, C.R.**  
A few preliminary results from the glaciogeophysical survey of the interior Ross Embayment (OSIRE) (1987, p.181-184, eng) 41-3280  
Continuation of glaciogeophysical survey of the interior Ross Embayment: summary of 1984-1985 field work (1985, p.63-64, eng) 41-2626  
Deformation of till beneath ice stream B, West Antarctica (1986, p.57-59, eng) 41-1780  
Digital radar system for echo studies on ice sheets (1987, p.206-210, eng) 41-4459  
Firn studies at upstream B, West Antarctica (1985, p.65-66, eng) 41-2627  
Grain growth in polar ice: Pts. 1 and 2 (1986, p.415-433, eng) 41-4297  
Microearthquakes under and alongside Ice Stream B, Antarctica, detected by a new passive seismic array (1987, p.30-34, eng) 41-4430  
Remote sensing of the Ross Ice Streams and adjacent Ross Ice Shelf, Antarctica (1987, p.20-29, eng) 41-4429  
Seismic measurements reveal a saturated porous layer beneath an active antarctic ice stream (1986, p.54-57, eng) 41-1779  
West antarctic ice streams draining into the Ross Ice Shelf: configuration and mass balance (1987, p.1311-1336, eng) 41-3764
- Bentley, D.**  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 1. Laboratory tests on soils from Winchendon, Massachusetts, test sections (1986, 70p., eng) 41-593
- Bentley, D.L.**  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 2. Field validation tests at Winchendon, Massachusetts, test sections (1986, 62p., eng) 41-2613  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 2. Laboratory tests on soils from Albany County Airport (1987, 36p., eng) 41-2942
- Benussi, G.**  
New types of foundations for snow bridges (1987, p.44-46, ita) 41-4104
- Bercha, F.G.**  
On the scale effect in ice mechanics (1977, p.65-66, eng) 41-975
- Berdalnikov, D.**  
There are different types of ice (1986, p.46-47, rus) 41-1399
- Beresford, D.**  
Effect of the winter ice cover on Odonata larvae in a pond near Peterborough, Ontario (1984, p.165-181, eng) 41-1958
- Berezhaov, K.P.**  
Reliability and durability of metal structures of industrial buildings in the Yakut ASSR (1985, p.37-47, rus) 41-2849
- Berezin, I.A.**  
Designing moorings built of fused enlarged blocks (1986, p.25-26, rus) 41-2788  
Improvement of technology and quality control of concreting moorings in the northeastern Ob'-Irtys'k Basin (1986, p.59-68, rus) 41-2910  
Nondestructive control of the quality and bearing strength of driven reinforced concrete piles (1986, p.62-63, rus) 41-883
- Berezinskii, N.A.**  
Results of size distribution study of natural ice-forming nuclei using a universal cascade aerosol sampler (1986, p.55-63, rus) 41-3671  
Size dependence of natural aerosol for ice nucleation (1986, p.28-32, rus) 41-2879
- Berezni, V.**  
Icebreakers: fuel economy and safe navigation (1986, p.35-36, rus) 41-436
- Berezovskii, B.I.**  
Manual for construction foremen working in the northern construction-climatic zone (1986, 328p., rus) 41-3664
- Berg, N.H.**  
Snow redistribution: strip cuts at Yuba Pass, California (1987, p.285-295, eng) 41-4318
- Berg, R.L.**  
Frost action predictive techniques for roads and airfields. A comprehensive survey of research findings (1986, 45p., eng) 41-3143  
Statement of research needs to address airport pavement distress (1987, p.981-1012, eng) 41-4050
- Berger, R.**  
Scattering at mm wavelengths from *in situ* snow (1986, p.1.6.1-1.6.2, eng) 41-95
- Berger, T.F.**  
New air-entrainment and plastifying admixture for concretes (1985, p.9-13, rus) 41-415
- Bergesen, B.**  
Improved thermal insulation in windows by laminar airflows (1986, p.992-1003, eng) 41-1391
- Berggren, A.-L.**  
Engineering creep models for frozen soil behaviour (1983, 357p., eng) 41-2014
- Bergman, J.A.**  
Predicting forest snow water equivalent (1985, p.154-162, eng) 41-449
- Bergsager, E.**  
Hydrocarbon resources and perspectives in future exploitation in Norwegian and Barents Seas (1986, p.64-93, eng) 41-2266
- Berkin, N.S.**  
Peculiarities of water balance structure in different landscapes of Priangar'e (1986, p.187-193, rus) 41-1375
- Berman, D.I.**  
Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction) (1985, 160p., rus) 41-4118
- Berner, D.E.**  
Behavior of prestressed lightweight concrete subjected to high-intensity cyclic stress at cryogenic temperatures (1986, p.727-736, eng) 41-1865  
Static and cyclic behavior of structural lightweight concrete at cryogenic temperatures (1985, p.439-445, eng) 41-890
- Bernier, P.Y.**  
Extrapolating snow measurements on the Marmot Creek Experimental Basin (1986, p.83-92, eng) 41-4514  
Forest hydrology and watershed management (1987, 625p., eng) 41-4313
- Bernshtein, L.B.**  
Tidal power plants (1987, 296p. (Pertinent p.239-273), rus) 41-3675
- Berntsson, L.**  
Damage of concrete sleepers by calcium chloride (1982, p.87-92, eng) 41-2113
- Berri, B.L.**  
Electromagnetic processes accompanying water crystallization and ice deterioration (1986, p.24-32, rus) 41-2149
- Berria, S.N.**  
Comparative snow accumulation and melt during rainfall in forested and clear-cut plots in the western Cascades of Oregon (1987, p.135-142, eng) 41-2465
- Berry, B.A.**  
Oil slicks in ice covered rivers (1985, p.369-379, eng) 41-3471
- Berube, M.**  
Condition survey of concrete structures built with potentially alkali-reactive limestone aggregates from the Quebec City area (Quebec, Canada) (1987, p.1343-1364, eng) 41-3730
- Berzins, W.E.**  
Geotechnical design for an arctic mobile offshore drilling unit (1986, p.956-979, eng) 41-3170
- Besant, R.W.**  
Study of heat loss through basement floors (1986, p.336-350, eng) 41-1381



- Boopalyl, V.G.**  
Glacier ice in Quaternary deposits of the Malyk-Siyenakaya basin [1984, p.107-116, rus] 41-1911  
Pleistocene glaciations in East Asia [1984, 212p., rus] 41-1910
- Betz, A.**  
R/V *Polar Duke*—a new vessel for antarctic research support [1985, p.437-440, eng] 41-224
- Betz, T.**  
Prediction and measurement of melting heat transfer to an unfixed phase change material heated in a horizontal concentric annulus [1986, p.1793-1798, eng] 41-3297
- Betzler, A.**  
Glacial and periglacial investigations in Skidadalur, Tröllas-lagi, Northern Iceland [1986, p.1-18, eng] 41-1788
- Beyer, R.P.**  
Pitzer-Debye-Hückel limiting slopes for water from 0 to 350 C and from saturation to 1 kbar [1986, p.749-764, eng] 41-1553
- Bezinge, A.**  
Glaciers and sediment [1986, p.53-69, eng] 41-474
- Bialobzheskii, G.V.**  
Protection of roads from snow avalanches [1987, 61p., rus] 41-3734
- Bianchi, R.**  
Some remarks on the geology of Ganymede [1985, p.767-779, eng] 41-1737
- Bickenbach, J.E.**  
Legal implications of changing the application rates of salt on highways and sidewalks [1980, 51p., eng] 41-239
- Biehl, L.L.**  
Sun angle, view angle, and background effects on spectral response of simulated balsam fir canopies [1986, p.649-658, eng] 41-2739
- Bier, T.**  
Effect of curing and type of cement on the resistance of concrete to freezing in deicing salt solutions [1987, p.877-899, eng] 41-3711
- Blasov, G.F.**  
Engineering geocryology in hydraulic construction [1986, 205p., rus] 41-3439  
Prospects and problems of hydraulic power construction in the North [1986, p.5-12, rus] 41-3440
- Blello, M.A.**  
Regional and seasonal distributions of low pressure weather systems in and around Norwegian waters [1986, p.53-66, eng] 41-1799
- Billings, W.D.**  
Influence of water table and atmospheric CO<sub>2</sub> concentration on the carbon balance of arctic tundra [1984, p.331-335, eng] 41-1234
- Billotta, A.**  
Spring: time to demonstrate methods of snow removal [1987, p.26-34, ita] 41-4103
- Blada, G.**  
Residual snow cover in the Canadian Arctic in July: a means to evaluate the regional maximum snow depth in winter [1986, p.309-315, eng] 41-2689
- Bindschadler, R.A.**  
Antarctic ice-shelf boundaries and elevations from satellite radar altimetry [1987, p.229-235, eng] 41-4465  
Characterization of snow and ice reflectance zones on glaciers using Landsat thematic mapper data [1987, p.104-108, eng] 41-4444  
Glaciological investigations using the synthetic aperture radar imaging system [1987, p.11-19, eng] 41-4428  
Ice stream-ice shelf interaction in West Antarctica [1987, p.161-180, eng] 41-3279  
Seasat range measurements verified on a D-D ice sheet [1986, p.69-72, eng] 41-741
- Bingham, R.H.**  
Regionalization of winter low-flow characteristics of Tennessee streams [1986, 88p. + 2 maps, eng] 41-2137
- Birarda, G.**  
Caisson wellheads allow for future use of offshore exploration wells [1987, p.81-85, eng] 41-2571
- Birch, J.R.**  
Iceberg severity revisited [1986, p.413-428, eng] 41-157  
Physical approaches to iceberg severity prediction [1986, 104p., eng] 41-274
- Birchfield, G.E.**  
"Slow" physics of large continental ice sheets and underlying bedrock and its relation to the Pleistocene Ice Ages [1985, p.11,294-11,302, eng] 41-494  
Coupled marine ice-stream-ice-shelf model [1987, p.3-15, eng] 41-3590
- Bird, D.K.**  
Geologic field studies of the Miki Fjord area, East Greenland [1985, p.219-235, eng] 41-872
- Bird, J.B.**  
Arctic landforms: the formative processes [1987, p.75-79, eng] 41-3234
- Birmie, R.V.**  
Pixel-mixing effects and their significance to identifying snow condition from LANDSAT MSS data [1986, p.845-853, eng] 41-854
- Blaschoff, W.E.**  
Alaska: potential for giant fields [1986, p.131-142, eng] 41-2607
- Blaschowsberger, W.**  
Effect of salting on surface and ground water [1987, p.192-197, ger] 41-4519
- Bishop, G.C.**  
Sea ice pressure ridges: an algorithmic approach to their classification, morphology and statistical aspects [1986, p.157-184, eng] 41-1591
- Blasas, M.**  
Fatigue and freeze-thaw resistance of epoxy mortar [1985, p.33-37, eng] 41-647
- Bitkolov, N.Z.**  
Using artificial snow for dust control during mass-detonations in mines [1986, p.197-200, rus] 41-2178
- Bittner, F.**  
Completion of the Voerde freeze shaft [1985, p.1423-1428, eng] 41-855
- Bjegovic, D.**  
Considerations relating to corrosion for use in design of reinforced concrete structures exposed to a marine environment [1987, p.1603-1609, eng] 41-3733  
Theoretical aspect and methods of testing concrete resistance to freezing and deicing chemicals [1987, p.947-971, eng] 41-3715
- Bjerkelund, C.**  
Level ice physical properties in support of the M.V. *Arctic* performance trials in Baffin Bay and Admiralty Inlet, May-June 1986 [1986, 89p. + appenda., eng] 41-3363
- Björnsson, H.**  
Cause of Jökulhlaups in the Skaftá River, Vatnajökull [1977, p.71-78, eng] 41-589  
Delineation of glacier drainage basins on Hofsjökull and Western Vatnajökull [1986, p.19-21, eng] 41-731  
Grímsvötn geothermal area, Vatnajökull, Iceland [1984, p.25-50, eng] 41-590  
Marginal and supraglacial lakes in Iceland [1976, p.40-51, eng] 41-588  
Natural hazards caused by glaciers [1986, p.33-52, eng] 41-473  
Surface and bedrock topography of icecaps in Iceland mapped by radio echo-soundings [1986, p.11-18, eng] 41-730
- Black, P.B.**  
RIGIDICE model of frost heave and its input functions [1986, 111p., eng] 41-2581
- Black, R.A.**  
Case studies of ice distribution in hurricanes [1982, p.335-337, eng] 41-28
- Blaga, A.**  
Polymer modified concrete [1985, 4p., eng] 41-1940
- Blagoveshchenakii, V.P.**  
Using pattern recognition methods in engineering-glaciological terrain analysis [1986, p.165-169, rus] 41-1662
- Blagovidova, L.A.**  
Benthos in the experimental bays of the Ob' River below Novosibirsk [1985, p.66-72, rus] 41-1832
- Blair, S.C.**  
Confined compressive strength of saline ice at intermediate strain rates [1986, p.351-364, eng] 41-2665
- Blaisdell, G.L.**  
Comparative tractive performance of microspired and conventional radial tire designs [1986, 11p., eng] 41-3051
- Blanchet, D.**  
Ship/ice interaction pressures and energies during ship ramming [1987, p.215-223, eng] 41-2424
- Blanchet, J.P.**  
On radiative effects of anthropogenic aerosol components in Arctic haze and snow [1987, p.293-317, eng] 41-4206
- Blankenship, D.D.**  
Deformation of till beneath ice stream B, West Antarctica [1986, p.57-59, eng] 41-1780  
Microearthquakes under and alongside Ice Stream B, Antarctica, detected by a new passive seismic array [1987, p.30-34, eng] 41-4430  
Seismic measurements reveal a saturated porous layer beneath an active antarctic ice stream [1986, p.54-57, eng] 41-1779
- Blanshard, J.M.V.**  
Effect of polysaccharide stabilizers on the rate of growth of ice [1986, p.683-710, eng] 41-2491
- Blasco, S.M.**  
Ocean-bottom sea-ice scour: a computer-based data management system [1986, p.157-166, eng] 41-3106  
Regional correlation of Beaufort Sea ice scour extreme depth and relative age with environmental factors [1986, p.167-169, eng] 41-3107  
Regional ice-scour studies and data bases: issues and concerns [1986, p.206-209, eng] 41-3112
- Blatter, H.**  
Stagnant ice at the bed of White Glacier, Axel Heiberg Island, N.W.T., Canada [1987, p.35-38, eng] 41-4431
- Blench, T.**  
Mechanics of plains rivers [1986, 111p., eng] 41-2078
- Blindow, N.**  
Ice thickness and inner structure of the Vernagtferner (Oetzal Alps): results of electromagnetic reflection measurements [1986, p.43-60, eng] 41-3525
- Blinov, B.M.**  
Experience in casing wells in permafrost layers [1987, p.62-65, rus] 41-3774
- Blintsov, I.K.**  
Influence of pine, spruce and black alder forests on the formation of snow cover [1987, p.15-18, rus] 41-4171
- Bliss, L.C.**  
Growth forms, carbon allocation, and reproductive patterns of High Arctic saxifrages [1985, p.241-250, eng] 41-1245
- Blukhin, I.U.I.**  
Peculiarities of water balance structure in different landscapes of Priangar'e [1986, p.187-193, rus] 41-1375
- Blom, H.H.**  
Bryophytes on Bouvetøya [1986, p.11-22, eng] 41-917
- Blumenstein, R.**  
Measurement of the entrapment of sulfur dioxide by rime ice [1987, p.1765-1772, eng] 41-4538  
Simulation of orographic clouds with a nonlinear, time-dependent model [1982, p.322-324, eng] 41-24
- Blumenstein, R.R.**  
Microphysical growth processes during a rapidly evolving orographic cloud system [1982, p.481-484, eng] 41-62
- Bobby, W.**  
Review of interaction of icebergs with offshore structures [1985, p.693-704, eng] 41-668
- Bobra, A.M.**  
Behaviour and fate of arctic oil spills [1986, p.13-23, eng] 41-341
- Bobashev, T.S.**  
Types of mudflows and danger areas in the Kirghiz Range [1984, p.35-41, rus] 41-725
- Bobylyev, L.P.**  
Passive-active radar sounding of convective clouds [1984, p.769-772, eng] 41-4417
- Bodhaine, B.A.**  
Aerosol measurements at the South Pole [1986, p.223-235, eng] 41-1753
- Boehm, P.D.**  
Comparative fate of chemically dispersed and untreated oils in an arctic nearshore environment [1984, p.338-360, eng] 41-896
- Hoerner, W.-M.**  
Scattering from a layered medium connected with rough interfaces: matrix doubling method [1986, p.937-939, eng] 41-2301
- Bogatia, O.B.**  
Problems of technical tribology in Arctic service conditions [1986, p.779-792, eng] 41-1132
- Bogdanov, B.**  
Low temperature X-ray analysis of water/poly(oxyethylene) systems [1986, p.628-634, eng] 41-2573
- Bogdanov, B.G.**  
Regionalization of the Yakut ASSR for determining depths of placing geodetic markers [1986, p.30-31, rus] 41-3213
- Bogdanov, N.M.**  
Nucleation and growth of crystals in amorphous layers of water, heavy water and organic substances [1985, p.30-43, rus] 41-553
- Bogopol'skii, A.I.**  
Drilling complex for the Far North [1986, p.30-31, rus] 41-3773
- Bogorodskii, P.V.**  
Characteristics of atmospheric and hydrophysical processes in Fram Strait during fall and winter [1986, p.151-157, eng] 41-3267  
Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship [1986, p.139-145, eng] 41-3265  
Small-scale interaction between atmosphere and ocean at Maud Rise [1986, p.67-71, rus] 41-4189
- Bogorodskii, V.V.**  
Errors in measuring ice thickness by airborne radar [1985, p.660-662, eng] 41-1042  
Ice destruction. Methods and technology [1986, 214p., eng] 41-2564  
Laboratory investigation of the melting of ice by induced convection [1986, p.94-96, eng] 41-3682  
Some problems of building ice foundations in freezing seas [1986, p.162-166, rus] 41-2171
- Bogonlovskii, P.A.**  
Forecasting temperature and moisture regime of rock-earth fill dams [1986, p.89-96, rus] 41-3451  
Ice dams for protecting water areas of northern ports [1987, p.78-80, rus] 41-3652
- Boliarintsev, E.L.**  
Improving the map of spring-flood runoff layer of the Chukchi Peninsula rivers [1986, p.8-17, rus] 41-2649
- Bolarkina, A.P.**  
Estimation of industrial emission into the atmosphere [1987, p.14-23, rus] 41-3945
- Bolarkii, O.G.**  
Significance of cryogenic processes in the formation of ridge pool microrelief in high bogs [1986, p.147-151, rus] 41-2833
- Boikov, S.A.**  
Vertical electrical soundings in the vicinity of extended taliks [1986, p.172-180, rus] 41-2098
- Boltsov, G.V.**  
Temperature fields in the hulls of Arctic ships [1985, p.9-10, rus] 41-3350

- Bekk, E.N.**  
Development of landslide processes in the lower Ob' River valley [1986, p.106-116, rus] 41-4574
- Boles, M.A.**  
Analytical study of the effect of convection heat transfer on the sublimation of a frozen semi-infinite porous medium [1987, p.771-779, eng] 41-3943
- Bolkhovskii, V.F.**  
Cryogenic-inversion ridges of northwestern Siberia [1986, p.128-132, rus] 41-2829
- Bolov, V.R.**  
Estimating economic efficiency and profitability of studying preventive triggering of avalanches [1985, p.34-39, rus] 41-4842  
Snow physics, avalanches, mudflows [1985, 108p., rus] 41-4836  
Special forecasts of avalanche danger and possibilities of controlling snow and avalanche phenomena [1986, p.171-176, rus] 41-1664
- Bolsenga, S.J.**  
Techniques to measure the spectral reflectance of ice [1984, p.384-391, eng] 41-1356  
Under ice ecology pilot program: operations report and preliminary scientific results [1986, 44p. + append., eng] 41-4581
- Bol'shakov, K.P.**  
Increasing frost resistance of steel bridges [1986, p.12-14, rus] 41-1888
- Bol'shlianov, D.I.U.**  
Formation of the relief and deposits in areas of present-day glaciation on Severnaya Zemlya [1986, p.331-338, eng] 41-3625
- Bolster, S.J.S.**  
Nature of origin of earth hummocks, Breisterdalen, Jotunheimen/Norway [1985, p.94-115, eng] 41-586
- Boman, C.A.**  
Energy measurements and building parameters for an auditing and energy management system [1986, p.45-52, eng] 41-1378
- Bond, R.H.**  
Thermal performance of rigid cellular foam insulation at sub-freezing temperatures [1986, p.500-509, eng] 41-1384
- Bondar, P.P.**  
Strength and filtration properties of water-saturated peats in a detonation zone [1986, p.115-118, rus] 41-906
- Bondarenko, G.I.**  
Allowing for the effect of seasonally thawing frost-heaving soil on foundations of structures built on slopes [1985, p.53-55, rus] 41-302
- Bondarenko, V.G.**  
Two-dimensional time-dependent model of low clouds and fogs with account for dynamics, microphysics, radiation and ice phase [1984, p.625-628, eng] 41-4411
- Bondarenko, V.P.**  
Cutting tool ETR-223 for frozen ground excavation [1987, p.15-16, rus] 41-3067
- Bondarev, E.A.**  
Dynamics of temperature fields during accretion of floating ice [1986, p.39-42, rus] 41-2152
- Bondarik, G.K.**  
Possibilities of the landscape-indication method for engineering-geological studies of northern West Siberia [1987, p.15-29, rus] 41-4621
- Bondina, T.V.**  
Methods of compiling general radar maps of polar regions [1986, p.58-63, rus] 41-2717
- Bonnet, A.**  
Automatic anti-freeze system for solar water heaters [1983, 10 col., eng] 41-1980
- Booker, D.R.**  
High altitude tropical cirrus cloud observations [1982, p.215-217, eng] 41-19
- Booth, D.B.**  
Formation of ice-marginal embankments into ice-dammed lakes in the eastern Puget Lowland, Washington, U.S.A., during the late Pleistocene [1986, p.247-263, eng] 41-563  
Mass balance and sliding velocity of the Puget lobe of the Cordilleran ice sheet during the last glaciation [1986, p.269-280, eng] 41-1189
- Boravskaja, E.N.**  
Concretes for high dams [1985, 101p., rus] 41-413  
Increasing the safety of energy-producing structures under dynamic loading [1985, 113p., rus] 41-426  
State of stress and thermal stresses in concretes and reinforced concretes of hydraulic structures [1985, 104p., rus] 41-428
- Borcheninova, T.M.**  
Method of forecasting fresh snow avalanches in the Talasskiy Alatau [1986, p.39-43, rus] 41-774
- Borisovskaja, G.M.**  
Some characteristics of structural adaptation of boreal plants to Arctic conditions [1986, p.15-22, rus] 41-2599
- Borochov, A.**  
Effect of a freeze-thaw cycle on properties of microsomal membranes from wheat [1987, p.131-134, eng] 41-4178
- Borovikova, L.N.**  
Mathematical modeling of hydrometeorological processes [1986, 84p., rus] 41-543
- Borovoi, N.A.**  
Structural anomalies in ice-forming silver iodide aerosols [1986, p.97-99, rus] 41-1454
- Borrmann, S.H.**  
Aerosol size distributions in the marginal ice zone during the 1983 Marginal Ice Zone Experiment [1987, p.6971-6976, eng] 41-4253
- Borstad, G.A.**  
Motion of ice in the Beaufort Sea from satellite and aircraft images [1986, p.509-522, eng] 41-162
- Borsuk, O.A.**  
Ice rafting of clastic material [1985, p.51-54, rus] 41-4561
- Borthwick, I.**  
Ice and iceberg contingency planning and management for offshore oil and gas operations [1986, p.323-339, eng] 41-1104
- Boryst, R.D.**  
Characteristics of subcooled liquid clouds from mountaintop observations and measurements [1982, p.491-494, eng] 41-65  
Comparison of the trace constituent composition of unrimed and rimed snow crystals [1982, p.61-62, eng] 41-4
- Bosikov, N.P.**  
Alasay as indicators of soil moisture [1986, p.80-85, rus] 41-1370  
Methods of evaluating and mapping the susceptibility of cryogenic landscapes [1986, p.121-133, rus] 41-3493
- Boston, D.A.**  
Engineering program on anti-de-icing of the RAST track [1986, p.201-214, eng] 41-933
- Bosworth, H.W.**  
Natural rotor icing on Mount Washington, New Hampshire [1986, 62p., eng] 41-3480  
Triaxial testing of first-year sea ice [1986, 41p., eng] 41-2547
- Botany of Bouvetöya, South Atlantic Ocean. I. Cryptogamic taxonomy and phytogeography**  
Botany of Bouvetöya, South Atlantic Ocean. I. Cryptogamic taxonomy and phytogeography [1986, 79p., eng] 41-915
- Bott, J.F.**  
Laboratory investigation of lightweight heater tape for shuttle propellant tank [1986, 51p., eng] 41-2070
- Bottani, C.E.**  
Spectral analysis for the thermomechanical response of solids to low-frequency dynamic loads [1987, p.26-32, eng] 41-2066
- Bottomley, D.J.**  
Oxygen-18 studies of snowmelt runoff in a small Precambrian shield watershed: implications for streamwater acidification in acid-sensitive terrain [1986, p.213-234, eng] 41-2697
- Bouchard, D.**  
Atmospheric icing load measurements on a cable using the end tension [1987, p.131-141, eng] 41-4490
- Bouchard, M.A.**  
Acid neutralizing capacity of glacial sediments in western Ungava [1986, p.69-85, eng] 41-346  
Southeastward ice flow in central Quebec and its paleogeographic significance [1985, p.1536-1541, eng] 41-1239
- Boudreault, J.**  
Physical properties of asphalt cements used in Quebec from 1979 to 1986 [1986, p.302-319, eng] 41-2206
- Boulton, G.S.**  
Isotopic fractionation at the base of polar and sub-polar glaciers [1986, p.475-485, eng] 41-4303  
Push-moraines and glacier-contact fans in marine and terrestrial environments [1986, p.677-698, eng] 41-3072
- Bourgeois, J.C.**  
Pollen record from the Agassiz Ice Cap, northern Ellesmere Island, Canada [1986, p.345-354, eng] 41-3470
- Bourke, R.**  
Ice thickness measurements in the Arctic Ocean—a preliminary assessment based on digitization of submarine under ice sonar data [1986, p.225-235, eng] 41-2661
- Bourke, R.H.**  
Circulation and water masses of the East Greenland shelf [1987, p.6729-6740, eng] 41-4233  
Eddy near the Molloy Deep revisited [1987, p.6773-6776, eng] 41-4236  
MIZLANT 85 data report, results of an oceanographic cruise to the Greenland Sea, September 1985 [1986, 32p., eng] 41-1347  
Preliminary results of the oceanographic cruise of CCGS Sir John Franklin to Baffin Bay and Nares Strait, September 1986 [1986, 23p., eng] 41-2609  
Sea ice thickness distribution in the Arctic Ocean [1987, p.259-280, eng] 41-3037
- Bourras, M.**  
Drilling of a well from a sprayed floating ice platform Cape Allison C-47 [1987, p.9-16, eng] 41-2396
- Bout, P.**  
Pingo scars in Devès, Haute-Loire, France [1986, p.17-26, fre] 41-3577
- Boutroun, C.F.**  
Atmospheric toxic metals and metalloids in the snow and ice layers deposited in Greenland and Antarctica from prehistoric times to present [1986, p.467-505, eng] 41-672
- Lead concentration changes in antarctic ice during the Wisconsin/Holocene transition [1986, p.222-225, eng] 41-1630**
- Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP [1987, p.1197-1202, eng] 41-4603**
- Bouzigues, J.B.**  
Economic impact of roadblocks during thaw periods of the 1984-85 winter [1986, p.51-59, fre] 41-172
- Bouzoun, J.R.**  
Initial assessment of the 600-gallon-per-hour Reverse Osmosis Water Purification Unit. Field water supply on the winter battlefield [1986, 6p., eng] 41-529
- Bovicheva, T.M.**  
Waterproofing and corrosion prevention in hydraulic structures [1985, 100p., rus] 41-431
- Bowden, R.D.**  
Nitrogen budget of a moss (*Polytrichum*) ecosystem developing on glacial outwash sands in New Hampshire [1987, 149p., eng] 41-3346
- Bowell, J.**  
Landsat multispectral images of Antarctica applied to mapping and glaciology [1985, p.256-259, eng] 41-3327
- Bowley, C.J.**  
Comparative analysis of sea ice features using side-looking airborne radar (SLAR) and Landsat imagery [1981, 66p., eng] 41-4158  
Comparison of theoretical and actual satellite microwave brightness temperatures to determine snowpack properties [1981, 85p., eng] 41-2528
- Bozhedonov, A.I.**  
Using snow for dust control in northern mines [1986, p.193-196, rus] 41-2177
- Bozhenov, P.I.**  
Using byproducts of iron ore concentration in construction materials produced for the North [1986, 176p., rus] 41-2214
- Bozhinskii, A.N.**  
Fundamentals of avalanche science [1987, 280p., rus] 41-4129  
Probability model of snow stability on mountain slopes [1986, p.53-60, rus] 41-105  
Role of debris cover in the thermal physics of glaciers [1986, p.255-266, eng] 41-487
- Brakhsma, J.P.**  
Effect of salt application on roadway safety and mobility [1986, 90p., eng] 41-1413
- Brace, A.W.**  
Ice scraper [1983, 4 col., eng] 41-1671
- Bradford, D.**  
Ice cover deformations at Adams Island, winter 1982-1983 [1986, p.346-354, eng] 41-1160
- Bradford, M.**  
Hydrometeor distributions in California rainbands [1982, p.207-210, eng] 41-17
- Bradley, R.S.**  
Mass balance of two high Arctic Plateau ice caps [1987, p.123-128, eng] 41-3605
- Bragg, M.B.**  
Results of an experimental program investigating the effects of simulated ice on the performance of the NACA 63A415 airfoil with flap [1984, 183p., eng] 41-3255
- Braginets, O.**  
How to moor in ice [1986, p.60-61, rus] 41-1792
- Braham, R.R., Jr.**  
72-year Lake Michigan region snow climatology [1982, p.45-48, eng] 41-2  
Cloud physics of weather modification, pts. 1 and 2 [1986, p.215-222, 308-315, eng] 41-3137  
Coalescence-freezing precipitation mechanism [1986, p.142-145, eng] 41-3752  
Lake-effect snow storms on Lake Michigan, USA [1982, p.87-101, eng] 41-3375  
Midwest snow storm of 8-11 December 1977 [1983, p.253-272, eng] 41-3376  
Numerical simulation of the airflow over Lake Michigan for a major lake-effect snow event [1982, p.228-235, eng] 41-3377  
Storage effects on ice-forming nuclei measurements [1982, p.127-130, eng] 41-13
- Brahmer, G.**  
Factors affecting snowmelt streamwater chemistry in the Black Forest (West Germany) [1986, p.257-265, eng] 41-2621
- Brätko, V.N.**  
Underground storage of petroleum products in the Far North [1983, p.107-109, rus] 41-520
- Bralovskaja, V.A.**  
Heat and mass transfer during crystal growth from water solutions [1986, p.54-55, rus] 41-2382
- Braithwaite, R.J.**  
Calculation of degree-days for glacier-climate research [1984, p.1-8, eng] 41-621  
Estimation of runoff for proposed hydropower stations near Jakobshavn and Christianshåb, West Greenland [1985, p.100-103, eng] 41-574  
Glacier-climate investigations in 1984 at Qamanarsûp sermia, West Greenland [1985, p.108-111, eng] 41-576

- Ice ablation in West Greenland in relation to air temperature and global radiation [1984, p.155-168, eng] 41-632
- Use of remote-sensing data in modelling run-off from the Greenland ice sheet [1987, p.215-217, eng] 41-4461
- Brakel, J.**  
Arctic class hopper dredges [1986, p.988-1000, eng] 41-1142
- Braley, W.A.**  
Heat loss factors for insulated building foundations [1986, p.465-483, eng] 41-1383
- Brandadóttir, B.**  
Seismic activity in Vatnajökull in 1900-1982 with special reference to Skeidarárhlaups, Skaftárhlaups and Vatnajökull eruptions [1984, p.141-150, eng] 41-807
- Branson, D.**  
Medial moraines and surface melt on glaciers of the Torngat Mountains, northern Labrador, Canada [1986, p.350-354, eng] 41-4287
- Bratanow, T.**  
Ship motion in waterways clogged with broken ice [1986, p.503-571, eng] 41-1615
- Brattsev, A.A.**  
Pollution protection of water resources in the Timan-Pechora Task Economic Complex [1986, p.68-73, rus] 41-1170
- Brattsev, A.P.**  
Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex [1986, 119p., rus] 41-1167
- Brazel, A.J.**  
Surface wind characteristics along the Icefield Ranges, Yukon Territory, Canada [1985, p.125-134, eng] 41-1224
- Breaking the ice problem**  
Breaking the ice problem [1986, p.48-51, 55, eng] 41-4138
- Brecher, H.H.**  
Surface velocity determination on large polar glaciers by aerial photogrammetry [1986, p.22-26, eng] 41-412
- Brechtel, H.M.**  
Snow hydrology [1984, p.92-93, ger] 41-2077
- Brekhovskikh, V.L.**  
Statistical model of a laminated medium applied to computing ice cover thermal emission [1985, p.574-581, eng] 41-822
- Bremer, T.**  
Durability of concrete containing supplementary cementing materials in marine environment [1987, p.1227-1258, eng] 41-3725
- Brenckmann, M.**  
Canada's Arctic marine transportation research programs [1986, p.1-18, eng] 41-2021
- Brennan, A.M.**  
World Data Center A for Glaciology: activities and services [1986, p.131-138, eng] 41-971
- Brenner, H.C.**  
High-pressure cell for luminescence studies of condensed phases at low temperatures [1986, p.497-498, eng] 41-960
- Brenner, R.**  
Benefits and costs in the use of salt to deice highways [1976, 140p., eng] 41-4606
- Bresnahan, D.M.**  
Aircraft support of research in Antarctica [1986, p.473-494, eng] 41-2040
- Brett, P.O.**  
Operation of ships in the Arctic [1986, p.553-562, eng] 41-1618
- Brew, D.A.**  
Wright Glacier volcanic plug and dike swarm, southeastern Alaska [1987, p.116-118, eng] 41-3467
- Briazgin, N.N.**  
Method of preparing monthly charts of atmospheric precipitation in Antarctica [1986, p.109-116, eng] 41-3954
- Bricker, W.F.**  
Endicott slope protection design and construction [1987, p.47-54, eng] 41-2401
- Bridgeo, W.A.**  
Arctic water pollution research: applications of science and technology [1986, 193p., eng] 41-339
- Impact of a scientific conference—conference summary [1986, p.185-190, eng] 41-353
- Brigham, L.W.**  
Development of an ice piloting handbook [1986, p.447-456, eng] 41-1611
- Ice navigation studies in the Alaskan Arctic using POLAR class icebreakers [1985, p.441-447, eng] 41-225
- Winter marine transportation off Alaska [1986, p.805-819, eng] 41-2059
- Brink, G.E.**  
Multi-basin avalanche simulation: a model [1986, p.35-47, eng] 41-1302
- Brinkman, P.**  
Applying heat pipes to avoid the preferential freezing of highway bridge decks [1977, 5p., eng] 41-4604
- Britton, K.B.**  
Low temperature effects on sorption, hydrolysis and photolysis of organophosphonates—a literature review [1986, 47 refs., eng] 41-3050
- Broady, P.A.**  
Antarctic stream ecosystems: variability in environmental properties and algal community structure [1986, p.511-544, eng] 41-1858
- Brochu, M.**  
Proposal for a definition of present and fossil periglacial zones and of periglacial phenomena based on a synthetic and numerical approach [1986, p.27-30, fre] 41-3578
- Brockett, B.E.**  
Development of a frazil ice sampler [1986, 12p., eng] 41-3257
- Interaction of gravel fills, surface drainage, and culverts with permafrost terrain [1984, 35p., eng] 41-4072
- Morphology, hydraulics and sediment transport of an ice-covered river. Field techniques and initial data [1986, 37p., eng] 41-2612
- Bromwich, D.H.**  
Boundary layer studies in Terra Nova Bay, Antarctica [1986, p.13-16, eng] 41-1073
- Surface windfield over the antarctic ice sheet [1987, p.51-54, eng] 41-3683
- Brooks, R.L.**  
Ice sheet altimetry [1981, 30p., eng] 41-4159
- Brossard, T.**  
Biogeographic evolution of a moraine sector in Svalbard (Glacier Loven Central), quantitative balance 1978-1981 [1985, p.33-46, fre] 41-371
- Broster, B.E.**  
Sulphide erratics applied to subglacial exploration: St. Elias Mountains, British Columbia [1987, p.723-730, eng] 41-4080
- Broughton, J.Q.**  
Molecular dynamics investigation of the crystal-fluid interface. 4. Free energies of crystal-vapor systems [1986, p.5741-5748, eng] 41-497
- Molecular dynamics investigation of the crystal-fluid interface. 6. Excess surface free energies of crystal-liquid systems [1986, p.5759-5768, eng] 41-499
- Molecular dynamics of the crystal-fluid interface. 5. Structure and dynamics of crystal-melt systems [1986, p.5749-5758, eng] 41-498
- Browers, E.**  
Micropaleontology and sedimentology of the PB borehole series, Prudhoe Bay, Alaska [1986, 62p. + 14 plates, eng] 41-4600
- Brown, C.S.**  
Bed topography inferred from airborne radio-echo sounding of Columbia Glacier, Alaska [1986, 26p., eng] 41-2119
- Brown, H.M.**  
*In situ* burning of oil in experimental ice leads [1987, 27p., eng] 41-3075
- Brown, J.**  
Arctic Research and Policy Act of 1984 and its significance for the library and information community [1986, p.183-190, eng] 41-973
- Implementation of the United States Arctic Research and Policy Act of 1984 [1986, p.155-168, eng] 41-956
- Interaction of gravel fills, surface drainage, and culverts with permafrost terrain [1984, 35p., eng] 41-4072
- Brown, J.D.**  
Geotechnical engineering offshore, eastern Canada [1986, p.852-878, eng] 41-3169
- Brown, R.A.**  
Observation of the planetary boundary layer in the marginal ice zone [1987, p.6955-6965, eng] 41-4251
- Planetary boundary layer in the marginal ice zone [1986, p.65-78, eng] 41-3060
- Brown, R.H.**  
Ice satellites of Uranus [1978, p.711-729, eng] 41-1733
- Methane ice on Triton and Pluto [1983, p.817-827, eng] 41-1740
- Brown, R.L.**  
Constitutive equation for sea ice based on microstructure and irreversible thermodynamics [1987, p.209-213, eng] 41-2423
- Evaluation of the rheological properties of columnar ridge sea ice [1986, p.55-66, eng] 41-1582
- Granular structure of snow: an internal-state variable approach [1986, p.434-438, eng] 41-4298
- New instrument for determining strength profiles in snow cover [1986, p.299-301, eng] 41-690
- Numerical evaluation of flexible footing settlement into uniform snowcover [1986, p.131-138, eng] 41-1284
- Role of fracture in the attenuation rate of stress waves in snow [1987, p.207-212, eng] 41-4496
- Brown, T.J.**  
Subglacial aquifer bed model and water pressure dependent basal sliding relationship for a West Antarctic Ice Stream [1987, p.249-285, eng] 41-3284
- Brown, V.G.**  
Environmental impact analysis process [Pt.2] [1987, Var.p., eng] 41-3009
- Brown, W.L.**  
Laboratory studies of ion irradiations of water, sulfur dioxide, and methane ices [1985, p.317-335, eng] 41-1710
- Brownell, D.L.**  
New materials and concepts to reduce energy losses through structural thermal bridges [1986, p.739-750, eng] 41-1387
- Browning, K.A.**  
Examples of the operational utility of radar observations of cold air vortices [1986, p.247-256, eng] 41-1808
- Bruce, J.C.**  
Design and construction of a caisson retained island drilling platform for the Beaufort Sea [1978, p.2111-2120, eng] 41-2126
- Ice effects on arctic offshore structures [1983, p.14-15, eng] 41-788
- Bruce, R.H.**  
1985 surge and ice dam of Glacier Grande del Nevado del Plomo, Argentina [1987, p.131-132, eng] 41-3607
- Bruchet, A.**  
Humic substances from deposits of a natural laboratory: a blue lake on the ice-cap (Greenland) [1987, p.107-109, eng] 41-4140
- Bruemmer, F.**  
Life upon the permafrost [1987, p.30-39, eng] 41-3148
- Brugnot, G.**  
First "Snow Control Institute" [1987, p.35-38, fre] 41-3420
- Bruintjes, R.T.**  
Dominant ice processes in summertime cumulus clouds in the Bethlehem area [1984, p.63-66, eng] 41-4372
- Examination of double-plate ice crystals and the initiation of precipitation in continental cumulus clouds [1987, p.1331-1349, eng] 41-4424
- Brukhanda, V.I.**  
Method of calculating the warm-up date of snow cover [1986, p.10-23, rus] 41-771
- Brune, E.**  
*Icebird*—a new generation of polar resupply vessel [1986, p.512-522, eng] 41-2042
- Bryan, K.**  
Diagnostic ice-ocean model [1987, p.987-1015, eng] 41-4208
- Bryzhko, S.A.**  
Drilling-complex BTSE-600 in hard rocky ground [1986, p.41, rus] 41-2790
- Buschidze, A.K.**  
Dynamic loads of high density mudflow mass on transverse structures [1985, p.356-360, rus] 41-1623
- Bubeck, R.B.**  
Seaway performance improvement program [1986, p.101-122, eng] 41-927
- Buchko, N.A.**  
Seasonally active ground cooling devices used in hydraulic construction [1983, p.29-40, rus] 41-4473
- Buck, B.M.**  
Nearfield noise measurements from an Arctic pressure ridge [1986, p.256-264, eng] 41-1029
- Non-resonant acoustic projector (NRAP) for low frequency studies [1985, p.454-459, eng] 41-227
- Buck, K.R.**  
Microheterotrophs in the ice-edge zone: an AMERIEZ study [1985, p.136-137, eng] 41-2958
- Organism losses during ice melting: a serious bias in sea ice community studies [1986, p.237-239, eng] 41-1016
- Buckley, J.T.**  
Ice scour and seabed engineering; proceedings of a Workshop on Ice Scour Research [1986, 322p., eng] 41-3086
- Buckley, R.G.**  
*In situ* measurements of the resistivity of antarctic sea ice [1986, p.285-290, eng] 41-1295
- Scattering and absorption of visible light by sea ice [1987, p.867-869, eng] 41-3639
- Budd, W.F.**  
Antarctic iceberg distribution and dissolution [1986, p.242-251, eng] 41-685
- Casey snow runway data report, 1983-84 [1984, 98p., eng] 41-4526
- Casey snow runway meteorological records, 1984 [1987, 98p., eng] 41-4528
- Casey snow runway tests, 1983-84 [1984, 111p., eng] 41-4527
- Modelling the response of the West Antarctic Ice Sheet to a climatic warming [1987, p.321-358, eng] 41-3287
- Numerical modelling of the large-scale basal water flux under the West Antarctic Ice Sheet [1987, p.293-320, eng] 41-3286
- Budin, A.I.A.**  
Field studies of the effect of year-round arctic navigation on mooring structures [1986, p.142-150, rus] 41-3457
- Bufal, V.V.**  
Regionalization of the BAM zone on the basis of quantitative analysis of vegetation maps [1985, 181p., rus] 41-252
- Bugae, V.G.**  
Construction of mathematical models of well drilling processes in frozen ground based on experimental investigations [1978, p.69-73, rus] 41-1324
- Bugrovskii, V.V.**  
Estimating chemical composition of vegetation, soils and natural waters in the central and southern taiga [1986, p.64-72, rus] 41-2347
- Bulanov, S.A.**  
Numeric modeling of evolution of the Greenland ice sheet [1984, p.892-903, eng] 41-2074

- Butkov, M.V.**  
Computerized simulation of artificial seeding of mixed stratified clouds containing crystals of different forms [1986, p.3-16, rus] 41-1555
- Bulatikh, A.B.**  
Behavior of the Medvezhiy glacier during 1982-1984 [1986, p.99-106, rus] 41-1647  
Calculating bottom relief of the active part of the Medvezhiy glacier [1986, p.195-201, rus] 41-134
- Bukhman, V.I.**  
Concrete work at the Kureyskaya power plant site [1986, p.50-54, rus] 41-2869
- Bulanov, V.A.**  
Periodic phase transformations in liquids [1986, 280p., rus] 41-1271
- Bulavintsev, V.I.**  
Reserved zones of Franz Josef Land [1986, p.7-18, rus] 41-3861
- Bundtzen, T.K.**  
Alaska's mineral industry, 1985 [1986, 68p., eng] 41-569
- Bunker, R.C.**  
Cataclysmic Late Pleistocene flooding from glacial Lake Missoula: a review [1985, p.1-41, eng] 41-2683
- Bunn, F.E.**  
Nimbus-7 microwave radiometry of ocean surface winds and sea ice [1986, p.961-970, eng] 41-3991
- Bunza, G.**  
Effect of snow-cover blasting on erosion [1984, p.181-190, ger] 41-713
- Burch, D.M.**  
Thermal resistance measurements of a well-insulated wall using a calibrated hot box [1986, p.957-973, eng] 41-1389
- Burcham, T.S.**  
Antifreeze glycoproteins from polar fish blood [1986, p.59-78, eng] 41-3165
- Burchuladze, N.N.**  
Studying the cooling and freezing of drops under conditions of strong moisture deficiency and low pressure [1986, p.20-31, rus] 41-3463
- Burchuladze, Sh.V.**  
Using stress transducers in predicting frost resistance of concrete [1985, p.85-88, rus] 41-1622
- Burckle, L.H.**  
Ice diatom floras, Arthur Harbor, Antarctica [1987, p.163-171, eng] 41-3427
- Burg, J.P.**  
Dynamic recrystallization and fabric development during the simple shear of ice [1986, p.857-870, eng] 41-2809  
Origin of kinks in polycrystalline ice [1986, p.27-48, eng] 41-1036
- Burger, G.J.**  
Enhancing Landsat data acquired under very low illumination [1986, p.801-807, eng] 41-2741
- Burke, G.G.**  
Automated data acquisition for structural snow loads [1984, p.26-36, eng] 41-1944
- Burke, H.K.**  
Comparison of theoretical and actual satellite microwave brightness temperatures to determine snowpack properties [1981, 85p., eng] 41-2528
- Burke, S.P.**  
Non-resonant acoustic projector (NRAP) for low frequency studies [1985, p.454-459, eng] 41-227
- Burkov, G.**  
Tiksi moves through ice [1986, p.42-45, rus] 41-3204
- Burleigh, D.D.**  
Thermophysical properties data on graphite/polyimide composite materials [1982, p.54-72, eng] 41-1988
- Burn, C.**  
Report of activities, 1984-1985 [1986, 21p., eng] 41-1678
- Burn, C.R.**  
On the origin of aggradational ice in permafrost [1986, 222p. + append., eng] 41-3507  
Outward flux of vapour from frozen soils at Mayo, Yukon Territory [1986, p.794-803, eng] 41-2684  
Stratigraphic, isotopic, and mineralogical evidence for an early Holocene thaw unconformity at Mayo, Yukon Territory [1986, p.794-803, eng] 41-2684
- Burnasheva, V.V.**  
Using satellite information for the regionalization of landscapes in geocryological investigations (the case of Aldan Highlands) [1986, p.49-54, rus] 41-3517
- Burnet, P.F.**  
Canada and polar science [1987, 116p. + append., eng] 41-3414
- Burns, B.A.**  
Computer-assisted techniques for geophysical analysis of SAR sea-ice imagery [1986, p.947-959, eng] 41-3990  
MIZEX 84 ice surface measurements from the FS *Polarstern* [1986, p.30-40, eng] 41-3057  
Multisensor comparison of ice concentration estimates in the marginal ice zone [1987, p.6843-6856, eng] 41-4242  
Use of synthetic aperture radar-derived kinematics in mapping mesoscale ocean structure within the interior marginal ice zone [1987, p.6837-6842, eng] 41-4241
- Burns, J.A.**  
Composition and structure of planetary rings [1985, p.655-679, eng] 41-1729
- Burtsev, A.I.**  
Methods of determining atmospheric and oceanic parameters from satellite data [1986, 160p., rus] 41-2714
- Buser, O.**  
Rigid frame model of porous media for the acoustic impedance of snow [1986, p.71-92, eng] 41-1262
- Bushuev, A.V.**  
Cluster analysis of airborne-radar images of ice covers [1986, p.64-72, rus] 41-2718  
Sea ice concentration assessed from aerospace imagery [1987, p.181-189, eng] 41-3626
- Butler, D.R.**  
Floristic patterns on avalanche paths in the northern Rocky Mountains, USA [1986, p.231-238, eng] 41-1257  
History of high-magnitude snow avalanches, southern Glacier National Park, Montana, U.S.A. [1985, p.175-182, eng] 41-3969  
Pinedale deglaciation and subsequent Holocene environmental changes and geomorphic responses in the central Lemhi Mountains, Idaho, U.S.A. [1986, p.39-46, eng] 41-2705  
Snow-avalanche hazards in Glacier National Park, Montana: meteorologic and climatologic aspects [1986, p.72-87, eng] 41-73
- Butt, K.A.**  
Improving the display of marine radar returns from first year sea ice [1986, 75p., eng] 41-244
- Buttle, J.M.**  
Energy balance modelling of snowmelt in a suburban environment: a progress report [1984, p.204-208, eng] 41-1961  
Modelling the areal depletion of a snowcover in a forested catchment [1987, p.43-60, eng] 41-3405  
Snow accumulation and snowmelt runoff in a suburban environment [1985, p.126-138, eng] 41-1490  
Snowpack depletion in a forested catchment [1985, p.267-271, eng] 41-1503
- Buznev, A.I.A.**  
Ice cover and navigation conditions in the Arctic [1986, p.176-178, rus] 41-1665
- Buzynkin, A.I.**  
Structural-functional interrelationships and productivity of phytocenoses [1983, 140p., rus] 41-2746
- By radio from Antarctica**  
By radio from Antarctica [1986, p.92-95, rus] 41-4192
- Bykov, A.V.**  
Different domains of application of cold. Manual [1985, 271p. (Pertinent p.: 42-66, 99-125, 222-260), rus] 41-3154
- Bykov, I.U.A.**  
Planning the distribution of settlements when designing railroads for little-explored regions [1984, p.34-41, rus] 41-2454
- Bykova, V.I.**  
Basic regularities governing the formation of a seasonally freezing rock layer in the southern Far East [1985, p.95-97, rus] 41-322
- Bykova, V.S.**  
Engineering geology in construction [1986, 175p., rus] 41-2889
- Cabrera, G.**  
Glacier mass balances in the Cajon del Rubio, Andes Centrales Argentinos [1986, p.83-90, eng] 41-1307
- Cabrera, G.A.**  
1985 surge and ice dam of Glaciér Grande del Nevado del Plomo, Argentina [1987, p.131-132, eng] 41-3607
- Cadle, S.H.**  
Dry deposition to snow in an urban area [1986, p.297-308, eng] 41-2478  
Wintertime wet and dry deposition in northern Michigan [1986, p.1171-1178, eng] 41-796
- Cagnati, A.**  
Avalanche warning bulletins [1986, p.20-27, ita] 41-2234
- Cahalan, R.F.**  
Large-scale short-period sea ice atmosphere interaction [1986, p.10709-10717, eng] 41-1010
- Cain, J.B.**  
Assessment of a small snowmobile for long-distance unsupported travel [1987, p.597-601, eng] 41-3859
- Calcagno, L.**  
Interaction between solar energetic particles and interplanetary grains [1985, p.273-285, eng] 41-1707
- Calkin, P.E.**  
Direct measurement of lichen growth in the central Brooks Range, Alaska, U.S.A., and its application to lichenometric dating [1986, p.289-296, eng] 41-1177
- Calkins, D.J.**  
Calibrating HEC-2 in a shallow, ice-covered river [1986, 25 refs., eng] 41-2531  
Ice problems associated with rivers and reservoirs [1986, p.70-98, eng] 41-475
- Cameron, M.**  
Ground-based system for sensing radiometric properties of snow, ice, and water [1986, p.971-980, eng] 41-3992
- Cameron, N.P.**  
Hydrocarbon development—a Yukon perspective: an annotated bibliography of sources available in the Yukon Archives [1986, 536p., eng] 41-4639
- Cames-Pintaux, A.M.**  
Numerical two-dimensional study of thermal behaviour around a cylindrical cooled underground cavity. Domain of validity of an axisymmetrical scheme [1986, p.105-114, eng] 41-1281
- Campanella, R.G.**  
Seismic cone penetration testing in the near offshore of the Mackenzie Delta [1987, p.154-159, eng] 41-2979
- Campbell, J.**  
Effects of snow and ice on wetland water chemistry [1984, p.143-147, eng] 41-1955
- Campbell, J.E.**  
Measurements of ice motion in Lake Erie using satellite-tracked drift buoys [1987, 22p., eng] 41-4577
- Campbell, M.D.**  
Thermophysical properties data on graphite/polyimide composite materials [1982, p.54-72, eng] 41-1988
- Campbell, W.J.**  
Variations of mesoscale and large-scale sea ice morphology in the 1984 marginal ice zone experiment as observed by microwave remote sensing [1987, p.6805-6824, eng] 41-4239
- Campins, H.**  
Ice in cometary grains [1985, p.443-452, eng] 41-1718
- Camplatron, B.**  
Interaction between a natural snowfall and a cooling tower plume: an experimental study with a millimetric Doppler radar [1987, p.1375-1383, eng] 41-4541
- Canada. Atmospheric Environment Service. Ice Centre**  
Ice thickness data, winter 1980-1981 [1987, 50p., eng] 41-3812
- Canada. Department of Indian and Northern Affairs**  
Northern Oil and Gas Action Program (NOGAP) bibliography. Volume 1 [1986, 51p., eng] 41-696
- Canada. Dept. of the Environment. Atmospheric Environment Service**  
Climatic atlas. Map series 2—Precipitation [1986, 2p. + 48p. of maps, eng] 41-4521  
Climatic atlas. Map series 3—Pressure, humidity, clouds, visibility, and days with...thunderstorms, hail, smoke/haze, fog, freezing precipitation, blowing snow, frost, snow on the ground [1987, 3p. + 108p. of maps, eng] 41-4522
- Canadian Building Congress, 4th, Oct. 6-8, 1985**  
Proceedings. Learning from experience/avoiding failures [1985, 381p., eng] 41-3190
- Canadian Conference on Marine Geotechnical Engineering, 3rd, St. John's Newfoundland, June 1986**  
[Proceedings] [1986, p.852-1036 (Vol.3), eng] 41-3168
- Canadian East Coast Workshop on Sea Ice, Bedford, Quebec, Jan. 7-9, 1986**  
Proceedings [1986, 668p., eng] 41-142
- Cannon, D.G.**  
Interaction of sea waves with discrete ice floes [1987, 88p., eng] 41-4601
- CANPOLAR Consultants, Ltd.**  
Iceberg detection by airborne radar: technology review and proposed field program [1986, 235p., eng] 41-275
- Capen, C.**  
Measurements of the north polar cap of Mars and the Earth's Northern Hemisphere ice and snow [1986, p.223-235, eng] 41-959
- Carette, G.**  
Durability of concrete containing supplementary cementing materials in marine environment [1987, p.1227-1258, eng] 41-3725
- Carey, V.P.**  
Heat transfer, 1986; proceedings [1986, 6 vols. + 1 vol. of abstracts, eng] 41-3288
- Carino, N.J.**  
Proposed standard specification for cold weather concreting (ACI 306.1) [1986, p.1043-1047, eng] 41-2473
- Carleton University. Geotechnical Science Laboratories, Ottawa**  
Feasibility study for stresses in a pipeline buried in freezing soil [1982, 29p., eng] 41-3505  
Investigation of permafrost and climate change—long term study. Phase 2. Preliminary final report (1984-1985) [1986, var.p., eng] 41-3506  
Report of activities, 1984-1985 [1986, 21p., eng] 41-1678
- Carlson, L.**  
Canyon Creek bridge [1986, p.43-47, eng] 41-827
- Carmack, E.C.**  
Circulation and mixing in ice-covered waters [1986, p.641-712, eng] 41-2996
- Carmichael, T.**  
Evaluation and prediction of concrete durability—Ontario Hydro's experience [1987, p.1121-1154, eng] 41-3721
- Carnegie, D.**  
Vegetation and terrain mapping in Alaska using Landsat MSS and digital terrain data [1986, p.779-786, eng] 41-3847
- Carpenter, B.A.**  
Engineering geology of the Government Hill area, Anchorage, Alaska [1986, 32p., eng] 41-3224

- Carrara, P.E.**  
Deglaciation of the mountainous region of northwestern Montana, U.S.A., as indicated by late Pleistocene ashes [1986, p.317-325, eng] 41-1179
- Carrasquillo, P.**  
Durability of concrete containing fly ash for use in highway applications [1987, p.843-861, eng] 41-3709
- Carrier, Y.**  
Residual snow cover in the Canadian Arctic in July: a means to evaluate the regional maximum snow depth in winter [1986, p.309-315, eng] 41-2689
- Carrilho, M.V.**  
Numerical simulation of hail embryo growth [1984, p.505-508, eng] 41-4406
- Carroll, S.S.**  
Simulation of airborne snow water equivalent measurement errors made over a forested watershed [1985, p.248-255, eng] 41-451
- Carroll, T.R.**  
Airborne snow water equivalent measurements over a forested environment using terrestrial gamma radiation [1984, p.101-115, eng] 41-1951  
Simulation of airborne snow water equivalent measurement errors made over a forested watershed [1985, p.248-255, eng] 41-451
- Carsey, F.**  
Beaufort-Chukchi ice margin data from Seasat: ice motion [1987, p.7163-7172, eng] 41-4268
- Carsey, F.D.**  
Radar image interpretation techniques applied to sea ice geophysical problems [1983, p.116-117, eng] 41-3348  
Remote sensing as a research tool [1986, p.1021-1098, eng] 41-3002  
Weddell-Scotia sea marginal ice zone observations from space, Oct. 1984 [1986, p.3920-3924, eng] 41-1361
- Carstens, T.**  
Waves under a small travelling wave field [1986, p.331-341, eng] 41-1814
- Carter, J.**  
NAWS—a hull stress monitoring system for arctic ships [1986, p.407-419, eng] 41-943
- Casacchia, R.**  
Some remarks on the geology of Ganymede [1985, p.767-779, eng] 41-1737
- Casanova, J.**  
Study of the fit of various statistical distributions to ice nuclei concentration data [1984, p.135-140, spa] 41-2749
- Cassata, G.**  
Ice thickness deduced from gravity anomalies on Soler Glacier, Nef Glacier and the Northern Patagonia Icefield [1987, p.43-57, eng] 41-3827
- Caseldine, C.J.**  
(14)C dating and palaeoenvironment of the historic 'Little Ice Age' glacier advance of Nigardsbreen, Southwest Norway [1986, p.369-375, eng] 41-2472
- Cassidy, A.**  
Proceedings [1986, 2 vols. (877p.), eng] 41-2020
- Castedo, H.**  
Laboratory study of the effectiveness of various admixtures on the attenuation of moisture damage upon various foamed asphalt mixtures [1985, p.104-115, eng] 41-3335
- Catasta, G.**  
Climatic parameters and glacial fluctuations in the period 1950-1982 [1985, p.97-123, ita] 41-3179  
Problems and indications for a new inventory of Italian glaciers based on comparison between the Italian Inventory of 1959-62 and the World Glacier Inventory [1985, p.166-181, ita] 41-3185
- Cather, R.**  
Concrete durability: the interface between research and practice [1987, p.255-264, eng] 41-3695
- Cattaneo, C.J.**  
Device for detecting and preventing the formation of ice on contoured surfaces [1985, 6 col. + 3 sheets, eng] 41-2499
- Cattaneo, L.**  
Wind, earthquake, snow, and hail loads on solar collectors [1981, 88p., eng] 41-173
- Cavadinas, G.**  
Combination of simulated discharges of hydrological models. Application to the WMO intercomparison of conceptual models of snowmelt runoff [1986, p.21-30, eng] 41-4513
- Cavaliere, D.J.**  
Aircraft and satellite passive microwave observations of the Bering Sea ice cover during MIZEX West [1986, p.368-377, eng] 41-833  
Observation of sea ice using the 36-GHz surface contour radar [1987, p.393-402, eng] 41-4174  
On the relationship between atmospheric circulation and the fluctuations in the sea ice extents of the Bering and Okhotsk seas [1987, p.7141-7162, eng] 41-4267  
Shuttle Imaging Radar B (SIR-B) Weddell Sea ice observations: a comparison of SIR-B and scanning multichannel microwave radiometer ice concentrations [1987, p.7173-7179, eng] 41-4269
- Cegla, J.**  
Investigations into the desiccation processes in the Werenskiöld Glacier forefield (West Spitsbergen) [1986, p.5-24, eng] 41-1549
- Cenkner, A.A., Jr.**  
Dynamic testing of a cryogenic heat pipe/radiator [1978, p.105-110, eng] 41-469
- Ceppl, E.**  
Annealing effects on the hailstone structure [1984, p.271-274, eng] 41-4398
- Cerni, T.A.**  
Primary ice crystal production in cumulus congestus clouds of eastern Montana [1982, p.346-349, eng] 41-31
- Cerutti, A.V.**  
Glacial and climatic fluctuations during the last century in the Mont Blanc and Monte Rosa groups [1985, p.124-136, ita] 41-3180
- Chaburkin, V.F.**  
Reliability of welded steel joints of main pipelines [1985, p.54-61, rus] 41-2850
- Chacho, E.F.**  
Glaciers and sediment [1986, p.53-69, eng] 41-474  
Ice problems associated with rivers and reservoirs [1986, p.70-98, eng] 41-475  
Morphology, hydraulics and sediment transport of an ice-covered river. Field techniques and initial data [1986, 37p., eng] 41-2612  
Permafrost [1986, p.99-106, eng] 41-476
- Chakhlov, V.S.**  
Experience and problems of bridge construction under severe climatic conditions [1986, p.9-11, rus] 41-1887
- Chalikov, D.V.**  
Modeling of the Glaciers-Ocean-Atmosphere system [1986, 133p., rus] 41-2253
- Chamberlain, E.J.**  
Evaluation of selected frost-susceptibility test methods [1986, 51p., eng] 41-2614  
Freeze-thaw test to determine the frost susceptibility of soils [1987, 90p., eng] 41-3258  
Frost action predictive techniques for roads and airfields. A comprehensive survey of research findings [1986, 45p., eng] 41-3143  
Laboratory investigations of low temperature cracking susceptibility of asphalt concrete [1987, p.397-415, eng] 41-4030
- Chambers, H.W.**  
Rotorcraft icing technology—an update [1983, p.(8)1-(8)15, eng] 41-3231
- Chambers, J.L.C.**  
Crystallographic study of the perennially frozen ice surface of Patterned Lake, Framnes Mountains, East Antarctica [1986, p.520-526, eng] 41-4307
- Champoux, A.C.**  
Evolution of the Illecillewaet Glacier, Glacier National Park, B.C., using historical data, aerial photography and satellite image analysis [1986, p.31-33, eng] 41-733  
Photo-interpretation, digital mapping and the evolution of glaciers in Glacier National Park, B.C. [1986, p.27-30, eng] 41-732
- Chanal, A.**  
Design of transmission overhead lines: more satisfactory behavior of the French network since 1972 [1986, p.14-22, fre] 41-1561
- Chanceler, A.**  
Sand-gravel pockets in the lower Seine valley: a status report [1986, p.83-104, fre] 41-852
- Chandra, S.**  
Damage of concrete sleepers by calcium chloride [1982, p.87-92, eng] 41-2113
- Chang, A.T.C.**  
Microwave snow signatures (1.5 mm to 3 cm) over Alaska [1987, p.153-160, eng] 41-4492  
Nimbus-7 SMMR derived global snow cover parameters [1987, p.39-44, eng] 41-4432  
Regional differences in snowpacks in the northern U.S. as seen by the Nimbus-7 SMMR [1984, p.67-74, eng] 41-1948  
Remote sensing of snowpack properties by microwave radiometry [1986, p.201-207, eng] 41-3898
- Changnon, S.A., Jr.**  
Potential urban effects on precipitation in the winter and transition seasons at St. Louis, Missouri [1986, p.1887-1907, eng] 41-4056
- Chao, Y.**  
Railroad foundation freezing—hazard and prevention [1984, 382p., chi] 41-982
- Chapin, F.S., III**  
Effect of fertilizer on production and biomass of tussock tundra, Alaska, U.S.A. [1986, p.261-268, eng] 41-1175  
Environmental controls over carbon, nitrogen and phosphorus fractions in *Eriophorum vaginatum* in Alaskan tussock tundra [1986, p.167-195, eng] 41-2189  
Factors limiting seasonal growth and peak biomass accumulation in *Eriophorum vaginatum* in Alaskan tussock tundra [1986, p.257-278, eng] 41-2190  
Forest ecosystems in the Alaskan taiga—a synthesis of structure and function [1986, 230p., eng] 41-1898  
Growth and flowering in *Eriophorum vaginatum*, annual and latitudinal variation [1986, p.1524-1535, eng] 41-2480  
Reproduction of *Eriophorum vaginatum* by seed in Alaskan tussock tundra [1986, p.1-18, eng] 41-2188
- Chaplain, E.J.**  
Pneumatic conveying of ice into deep mines [1987, p.155-167, eng] 41-4329
- Chaplygin, I.U.O.**  
Geothermal investigations of perennially frozen strata of the Pur-Nadym interfluvium [1986, p.95-100, rus] 41-2538
- Charach, C.**  
Solidification in finite bodies with prescribed heat flux: bounds for the freezing time and removed energy [1987, p.233-240, eng] 41-2982
- Chari, T.R.**  
Iceberg-scour modelling at Memorial University of Newfoundland [1986, p.109-117, eng] 41-3098  
Model study of iceberg scouring in North Atlantic [1978, p.2319-2326, eng] 41-2128  
Seabed response to ice forces: summary and discussion [1986, p.148-153, eng] 41-3105  
Some factors influencing iceberg scour estimates [1986, p.234-239, eng] 41-849
- Charpentier, G.**  
Levels of services in winter road maintenance [1986, p.30-33, ita] 41-866
- Charrier, G.**  
Peat formation of the Rutor Glacier (Aosta Valley). Results obtained by palynostratigraphic study of new peat outcrops near the glacier snout [1985, p.144-149, ita] 41-3182
- Chashchina, M.K.**  
Dynamics of the development of cryogenic processes and phenomena in the Central Transbaikalia [1985, p.74-76, rus] 41-311
- Chattin, J.**  
High strength concrete control [1986, p.32-34, eng] 41-1468
- Cheang, L.C.**  
Design of gravity structures under iceberg loading [1987, p.55-62, eng] 41-2402
- Chechel, M.V.**  
Field methods of estimating frost heave properties of grounds [1985, p.108-110, rus] 41-329
- Chehayeb, F.S.**  
Numerical modelling of ice-structure interaction [1986, p.431-444, eng] 41-1610  
Sea-ice indentation in creeping mode [1987, p.965-983, eng] 41-3762
- Chekhovskii, A.L.**  
Formation of engineering-geological conditions in Central Mongolia [1987, 144p., rus] 41-2983
- Chellalah, X.**  
Freezing of water and water-salt solutions around aluminum spheres [1987, p.437-446, eng] 41-4542
- Chellis, S.E.**  
Sea ice pressure ridges: an algorithmic approach to their classification, morphology and statistical aspects [1986, p.157-184, eng] 41-1591
- Chelnokov, V.L.**  
Improving the design of underground hydraulic structures built in permafrost [1986, p.190-197, rus] 41-3462
- Chen, C.S.**  
Relationship between water activity and freezing point depression of food systems [1987, p.433-435, eng] 41-3574
- Chen, C.-T.A.**  
Salinity, alkalinity, and calcium of the Weddell Sea ice [1985, p.117-119, eng] 41-2953
- Chen, E.Y.**  
Using GOES thermal infrared data to map freeze zones for citrus and consequences for water management [1987, p.737-743, eng] 41-3777
- Chen, J.**  
Cartographic methods for large-scale glacier maps [1986, p.192-195, eng] 41-768  
Discussion on critical water content of frost heave [1986, p.223-226, chi] 41-1419  
Map of the Mount Gongga Glacier: a combination of terrestrial and aerial photogrammetry [1986, p.34-36, eng] 41-734
- Chen, M.H.**  
Combined forced and free convective flows of cold water over a vertical flat surface [1987, p.85-89, eng] 41-2406
- Chen, M.M.**  
On free convection melting of a solid immersed in a hot dissimilar fluid [1986, p.1087-1093, eng] 41-393
- Chen, S.**  
Numerical simulation of melting of ice around a horizontal cylinder [1986, p.1359-1369, eng] 41-564
- Chen, V.L.**  
Level ice indentation on a pile array [1987, p.273-279, eng] 41-2432
- Chen, X.**  
Anti-heave technology for hydraulic structures in the Aksu District, Xinjiang [1986, p.305-308, chi] 41-1436  
Experimental study on frost susceptibility of wind-blown sands [1986, p.233-238, chi] 41-1421  
Satellite snow-cover monitoring in the Qilian Mountains and an analysis for characteristics of stream snow-melt run-off in the Hexi region, Gansu, China [1987, p.225-228, eng] 41-4464  
Some characteristics of unsaturated clay during freezing [1986, p.209-216, chi] 41-1417
- Cheng, C.-Y.**  
Vacuum freezing process with multiple phase transformations of low pressure vapor [1983, 14 col., eng] 41-1674



- Cheng, K.C.**  
Maximum density effects on forced laminar convection in horizontal water pipes with near freezing wall temperature [1978, p.67-72, eng] 41-464
- Cheng, L.**  
Frozen drop embryos in Alberta hailstorms and their origins [1984, p.253-255, eng] 41-4394  
Hailstone concentration and size at the ground and at the melting level [1982, p.423-426, eng] 41-48
- Cheng, S.-W.**  
Vacuum freezing process with multiple phase transformations of low pressure vapor [1983, 14 col., eng] 41-1674
- Cherkasov, P.A.**  
Induced fluctuations of the Shumskiy glacier in Dzhungarskiy Alatau [1986, p.38-44, 168-173, eng] 41-1052
- Chernen'ki, B.I.**  
Peculiarities of studying the Pleistocene Edema series of the northeastern USSR [1984, p.159-173, rus] 41-1912
- Chernen'kova, T.V.**  
Structural reactions of forest phytocenoses (southern and northern taiga) to industrial pollution [1987, p.147-157, rus] 41-4571
- Cherniavets, V.V.**  
Improving Doppler radio logs installed on ice navigating ships [1987, p.26-27, rus] 41-2209
- Cherniavsky, J.Y.**  
Motion of ice in the Beaufort Sea from satellite and aircraft images [1986, p.509-522, eng] 41-162
- Chernous, P.A.**  
Estimating the accuracy of data on snow depth in avalanche catchments [1986, p.201-206, rus] 41-135  
Probability model of snow stability on mountain slopes [1986, p.53-60, rus] 41-105
- Chernov, I.U.E.**  
All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports [1986, 154p., rus] 41-3539
- Chernov, I.U.I.**  
Southern tundras in the system of zonal subdivision [1986, p.192-204, rus] 41-1341  
Southern tundras of Taymyr [1986, 208p., rus] 41-1331
- Chernova, L.P.**  
Annotated list of Soviet literature on glaciology for 1982 [1986, p.199-228, rus] 41-1668  
Glacier systems in the Soviet northeast [1980, p.166-185, eng] 41-2343
- Chernozubov, V.K.**  
Distributing device 110 kv with mobile reel-carriage switches [1986, p.9-10, rus] 41-912
- Chernykh, G.F.**  
Calculating frost resistance of road pavements [1985, p.18-19, rus] 41-508
- Chernysh, V.**  
Under severe climatic conditions. Special characteristics and problems of the construction of the Novosibirsk subway [1986, p.7-9, rus] 41-3738
- Cherry, S.M.**  
Dual polarisation radar measurements of the evolution of ice in clouds [1984, p.787-790, eng] 41-4418
- Cherskii, I.N.**  
Frost-resistant fluoroplastic seals for arctic machinery [1986, p.913-951, eng] 41-1139  
Methods of studying contact interactions of materials with ice and snow [1984, p.3-7, rus] 41-4504  
Problems of technical tribology in Arctic service conditions [1986, p.779-792, eng] 41-1132
- Cherskii, N.V.**  
Strength of materials and structural elements at low temperatures [1985, 119p., rus] 41-2846
- Chertovskoi, V.G.**  
Influence of timber industry on the environmental functions of northern taiga forests [1987, p.67-72, rus] 41-4569  
Present state and prospects for combined use of vegetational resources in the north European USSR [1985, p.26-31, rus] 41-3434
- Chesnokov, A.G.**  
Protection of roads from snow avalanches [1987, 61p., rus] 41-3734
- Chetverushkin, B.N.**  
All-Union tutorial seminar on mathematical modeling in science and technology. Summaries [1986, 333p., rus] 41-2381
- Cheung, H.C.**  
Arctic ship technology: the state of the art—1986 [1987, 91p., eng] 41-4582
- Chevallier, P.**  
Trace element analyses of spheres from the melt zone of the Greenland Ice Cap using synchrotron X ray fluorescence [1987, p.E649-E656, eng] 41-2728
- Chiba, S.**  
Study of the melting process in ice-air composite materials (in the case where a temperature gradient exists in porous materials) [1986, p.2138-2144, eng] 41-532
- Chichasov, G.N.**  
Influence of large-scale atmospheric processes on the fluctuations of glaciers [1986, p.52-58, 179-185, eng] 41-1055
- Chichladze, M.V.**  
Errors of slaved gyrocompasses when navigating in high latitudes [1987, p.34-35, rus] 41-2786
- Chiklishev, A.G.**  
Studies of natural conditions and prospects for their application [1985, 118p., rus] 41-4560
- Chikovani, E.N.**  
Problems of ecology and environmental protection (Collections of papers of the First Republican Conference), Vol.1 [1983, 292p., rus] 41-519
- Child, A.J.**  
Ice loads on offshore structures: the transition from creep to fracture [1986, p.157-161, eng] 41-1286
- Childs, P.W.**  
Dynamic thermal performance of insulated metal deck roof systems [1986, p.53-63, eng] 41-1379
- Chilingarov, A.**  
Ice Island underfoot [1986, 175p., rus] 41-3250
- Chill, R.W.C.**  
Unforgiving North [1985, p.157-164, eng] 41-3191
- Chindiaev, A.S.**  
Freezing and thawing of drained peat soils in forests of the central Ural Mountains [1987, p.60-64, rus] 41-3737
- Chinn, T.J.**  
New Zealand glaciers [1986, p.84-89, 206-208, eng] 41-1058
- Chirskova, V.G.**  
Modular construction of oil and gas industry objects. Manual [1986, 576p., rus] 41-1746
- Chisholm, R.A.**  
Frost action on transportation facilities [1983, 57p., eng] 41-3497
- Chistiakov, V.K.**  
Borehole gas sampler for determining absolute age of ice by carbon isotope analysis [1984, p.72-78, rus] 41-2355
- Chistobaev, A.I.**  
All-Union conference on geographic problems in regions of new economic development. Summaries of reports [1986, 172p., rus] 41-3974  
Scientific-technological progress and the development of natural resources of the North [1985, p.42-51, rus] 41-3435
- Chistov, S.V.**  
Regional investigations of thermal erosion [1986, p.61-63, rus] 41-4064
- Chiu, C.-S.**  
Tomographic resolution of mesoscale eddies in the marginal ice zone: a preliminary study [1987, p.6886-6902, eng] 41-4245
- Chiu, L.S.**  
Large-scale short-period sea ice atmosphere interaction [1986, p.10,709-10,717, eng] 41-1010
- Chizhov, A.B.**  
Using tritium in studying ground ice [1986, p.98-100, rus] 41-113
- Chizhov, A.V.**  
Regionalization of permafrost zone in the USSR for environmental protection purposes [1986, p.39, rus] 41-3975
- Chizhova, N.I.**  
Using tritium in studying ground ice [1986, p.98-100, rus] 41-113
- Chmielewski, J.M.**  
Ice scraper [1983, 4 col., eng] 41-1671
- Cho, C.**  
Effects of radiation on the melting of a semi-transparent, semi-infinite medium [1978, p.373-378, eng] 41-470
- Cho, N.**  
Experimental study of the ice column habit transitions [1982, p.100-102, eng] 41-6
- Chochia, N.G.**  
Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works) [1986, 165p., rus] 41-3428
- Chojnacki, B.**  
Destruction of concrete water tanks in a severe climate due to ice lensing [1987, p.723-739, eng] 41-3703  
Strength and durability of concretes made with type 10 cements used in Ontario [1987, p.973-996, eng] 41-3716
- Chong, G.J.**  
Consequences of deferred maintenance on transverse cracks [1987, p.637-686, eng] 41-4039
- Chou, S.-H.**  
Estimating ocean-air heat fluxes during cold air outbreaks by satellite [1981, 48p., eng] 41-2527
- Choularton, T.W.**  
Effect of rimet surface temperature on ice splinter production by the Hallett-Mossop process [1986, p.1254-1256, eng] 41-1478  
Model of the orographic enhancement of snowfall [1984, p.609-611, eng] 41-4408  
Secondary ice particle production by rime fragmentation and crystal breakup [1984, p.199-202, eng] 41-4392
- Chris Stethem and Associates, Ltd.**  
Collection of case histories of avalanche accidents [1984, var.p., eng] 41-3243
- Christa, R.**  
Effect of snow-cover blasting on erosion [1984, p.181-190, ger] 41-713
- Christensen, F.T.**  
Field measurements of ice growth suppression by surface insulation [1986, p.436-446, eng] 41-1111  
Sea ice strength measurements from the inner Danish waters in early 1985 [1986, p.247-253, eng] 41-1596  
Vertical ice forces on long straight walls [1987, p.215-218, eng] 41-3031
- Christensen, G.**  
Protected membrane flat roofs [1986, p.974-984, eng] 41-1390
- Christensen, M.**  
Hydrocarbon activities in Greenland [1986, p.94-110, eng] 41-2267
- Christian, D.**  
Relict ice scours on King William Island, N.W.T. [1986, p.64-72, eng] 41-3093
- Christie, P.**  
Nitrogen in two contrasting antarctic bryophyte communities [1987, p.73-93, eng] 41-3795
- Christodoulides, C.**  
Multiplicity of dielectric relaxation times of dispersed ice microcrystals [1987, p.195-211, eng] 41-4361
- Chrobok, S.M.**  
Causes and genetic types of continental limestone formation in periglacially and glacially load-casted areas [1986, p.277-284, ger] 41-1565
- Chu, P.C.**  
Air-ice-ocean coupled model for the formation of leads or polynyas [1986, p.79-88, eng] 41-3061  
Generation of unstable modes of the ice-ward-attenuating swell by ice breeze [1987, p.828-832, eng] 41-3996  
Ice/air feedback mechanism for the migration of the marginal ice zone [1986, p.54-64, eng] 41-3059  
Instability theory of ice-air interaction for the formation of ice edge bands [1987, p.6966-6970, eng] 41-4252  
Instability theory of ice-air interaction for the migration of the marginal ice zone [1986, p.863-883, eng] 41-869
- Chuang, C.H.**  
Electrical, thermal, and diffusional properties of columnar and planar ice crystals of finite length [1982, p.338-341, eng] 41-29
- Chubachi, S.**  
Concentrations of trace elements in surface snow in the area near Syowa Station, Antarctica [1986, p.47-55, eng] 41-3657
- Chubenko, A.G.**  
Snow water reserves in medium-altitude mountains in central Altai [1986, p.105-111, rus] 41-1968
- Chueca, R.**  
Thermal deformation of loaded concrete during thermal cycles from 20 C to -165 C [1984, p.639-644, eng] 41-2003
- Chugul, I.V.**  
Ice conditions during the *Mikhail Somov* cruise in a Soviet antarctic expedition [1986, p.75-78, rus] 41-4190  
Ice conditions in the "Weddell-POLEX-81" study area [1986, p.37-41, rus] 41-4185
- Chugunov, V.A.**  
Dynamics of ice-rock barriers under conditions of freezing of filtering rocks [1987, p.981-986, eng] 41-3242  
Effect of mass balance changes on fluctuations of an ice sheet interacting with the sea [1986, p.131-136, 247-250, eng] 41-1068
- Chugunova, M.V.**  
Chemical properties of tundra soils in the Kresty village area (western Taymyr) [1986, p.169-173, rus] 41-1340
- Chumachenko, A.I.**  
Improved sampler PLIAS-2 for capturing ice-forming nuclei on membrane filters [1986, p.76-80, rus] 41-1450  
Studying vertical distribution of ice-forming nuclei [1986, p.85-89, rus] 41-1452
- Chung, J.S.**  
Advances in ice mechanics—1987 [1987, 49p., eng] 41-2929  
Offshore and Arctic pipelines—1987 [1987, 199p., eng] 41-4628
- Chuprynin, V.I.**  
Stability of tundra landscapes under transport loads [1986, p.22-23, rus] 41-4063
- Churakova, O.M.**  
Concretes with complex admixtures for the Sayano-Shushenskaya dam [1985, p.71-73, rus] 41-419
- Chuvale, J.T.**  
Dynamic testing of a cryogenic heat pipe/radiator [1978, p.105-110, eng] 41-469
- Cichowicz, A.**  
Mean stresses in the upper layer of the Hans Glacier, Spitsbergen, and their relation to the glacier's seismicity [1986, p.13-19, eng] 41-1253
- Ciesielski, P.F.**  
Pliocene variations in the position of the Antarctic Convergence in the southwest Atlantic [1986, p.197-232, eng] 41-1264
- Clagett, G.P.**  
Alaska snow surveys and Federal-state-private cooperative snow surveys [1987, 3 pieces, eng] 41-3313  
Alaska snow surveys and Federal-State-Private cooperative snow surveys, Mar. 1, Apr. 1, May 1 and June 1, 1986 [1986, 4 issues, eng] 41-363

- Clancy, R.M.**  
Forecasting ice thickness and concentration in the Arctic using a numerical model [1986, p.155-164, eng] 41-2657
- Clapperton, C.M.**  
Late Quaternary moraines in the Chimborazo area, Ecuador [1985, p.135-142, eng] 41-1225
- Clark, D.K.**  
Satellite color observations of spring blooming in Bering Sea shelf waters during the ice edge retreat in 1980 [1987, p.7127-7139, eng] 41-4266
- Clark, J.I.**  
Controlling factors of ice-created seabed features related to production systems in Canadian cold oceans [1986, p.565-582, eng] 41-1118
- Clark, M.J.**  
Glacio-fluvial sediment transfer [1987, 524p., eng] 41-3124  
Ground data inputs to image processing for estimating terrain characteristics for glacio-hydrological analysis [1987, p.45-49, eng] 41-4433
- Clark, P.**  
Note on the glacial geology and postglacial emergence of the Lake Harbour region, Baffin Island, N.W.T. [1985, p.1864-1871, eng] 41-1243
- Clark, R.N.**  
Methane ice on Triton and Pluto [1985, p.817-827, eng] 41-1740  
Spectral properties of water ice and contaminants [1985, p.155-168, eng] 41-1703
- Clarke, G.K.C.**  
Effects of free water on snow gliding [1987, p.6301-6309, eng] 41-3644  
Measuring glacier-motion fluctuations using a computer-controlled survey system [1986, p.727-733, eng] 41-1931  
Professor Mathews, outburst floods, and other glaciological disasters [1986, p.859-868, eng] 41-2685
- Clarkson, P.D.**  
Exploitation of antarctic minerals [1987, p.121-132, eng] 41-3741
- Clausen, H.B.**  
Changes in precipitation chemistry at Dye-3, Greenland [1986, p.9849-9855, eng] 41-1021  
Greenland ice-sheet margin—a mine of ice for paleo-environmental studies [1987, p.229-234, eng] 41-3794
- Clayton, J.L.**  
Snow chemistry from Xixabangma Peak, Tibet [1986, p.542-543, eng] 41-4312
- Clement, P.**  
Intracellular photosynthate allocation and the control of Arctic marine ice algal production [1987, p.124-132, eng] 41-3998
- Clites, A.H.**  
Measurements of ice motion in Lake Erie using satellite-tracked drifter buoys [1987, 22p., eng] 41-4577
- Clough, A.H.**  
Preliminary evaluation of alluvial diamond discoveries in placer gravels of Crooked Creek, Circle District, Alaska [1987, 26p., eng] 41-2241
- Clough, H.F.**  
Centrifuge model experiments to determine ice forces on vertical cylindrical structures [1986, p.245-259, eng] 41-1292  
Determination of ice forces with centrifuge models [1986, p.49-60, eng] 41-1035
- Clukey, E.C.**  
Foundation load/deflection analysis for concrete island drilling system under ice loading [1987, p.33-40, eng] 41-2399
- Clulow, F.V.**  
Thermal index and thermal conductivity of snow and their relationship to winter survival of the meadow vole, *Microtus pennsylvanicus* [1984, p.153-164, eng] 41-1957
- Cohen, A.J.**  
Bibliography on ground water in glacial-aquifer systems in the northeastern United States [1986, 26p., eng] 41-2464
- Cohen, I.B.**  
Performance parameters for quasi canonical class A non-Gaussian noise: source distribution law  $\mu = 0$ , propagation law  $\gamma = 2$  [1986, 161p., eng] 41-2072
- Cohen, I.D.**  
Aircraft observations of large scale cloud systems [1982, p.203-206, eng] 41-16
- Cohen, M.D.**  
Damage mechanism of cyclic freezing-thawing in sulfur concrete [1987, p.357-360, eng] 41-3215
- Colbeck, S.C.**  
Classification of seasonal snow cover crystals [1986, p.59S-70S, eng] 41-1028  
Theory of microfracture healing in ice [1986, p.89-95, eng] 41-261
- Cole, D.**  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 1. Laboratory tests on soils from Winchendon, Massachusetts, test sections [1986, 70p., eng] 41-593
- Cole, D.M.**  
Effect of grain size on the internal fracturing of polycrystalline ice [1986, 71p., eng] 41-3479
- Frost action predictive techniques for roads and airfields. A comprehensive survey of research findings [1986, 45p., eng] 41-3143**
- Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. [1986, 138p., eng] 41-2549**
- Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 2. Field validation tests at Winchendon, Massachusetts, test sections [1986, 62p., eng] 41-2613**
- Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 3. Laboratory tests on soils from Albany County Airport [1987, 36p., eng] 41-2942**
- Small-scale projectile penetration in saline ice [1986, p.415-438, eng] 41-2668**
- Cole, F.E.**  
Reconnaissance survey of benthonic foraminifera from Baffin Island fiord environments [1986, p.232-239, eng] 41-1867
- Collins, C.M.**  
Morphology, hydraulics and sediment transport of an ice-covered river. Field techniques and initial data [1986, 37p., eng] 41-2612
- Collins, D.N.**  
Characteristics of meltwater draining from the portal of an alpine glacier during the emptying of a marginal ice-dammed lake [1986, p.114-122, 224-232, rus] 41-4354  
Climatic variation and runoff from Alpine glaciers [1984, p.127-145, eng] 41-630
- Collins, M.J.**  
Automated extraction of pack ice motion from advanced very high resolution radiometer imagery [1986, p.10,725-10,734, eng] 41-1012
- Collins, S.G.**  
Measuring glacier-motion fluctuations using a computer-controlled survey system [1986, p.727-733, eng] 41-1931
- Collins, W.T.**  
Grand Bank pits: description and postulated origin [1986, p.73-77, eng] 41-3094
- Colonell, J.M.**  
Outfall mixing design in shallow coastal water under Arctic ice cover [1985, p.856-862, eng] 41-1913
- Colony, R.**  
Random transport of oil by sea ice [1986, p.25-39, eng] 41-342
- Combined scientific and technical preparation for economic development of the Yamal Peninsula**  
Combined scientific and technical preparation for economic development of the Yamal Peninsula [1987, p.31-34, rus] 41-2784
- Comfort, G.**  
Evaluation of sea bottom ice scour models [1986, 71p. + graphs., eng] 41-273  
Review of deterministic ice-scour models [1986, p.97-108, eng] 41-3097
- Comiskey, A.L.**  
Prediction of vessel icing [1986, p.1793-1806, eng] 41-2845
- Comiso, J.C.**  
Multifrequency passive microwave observations of first-year sea ice growth in a tank [1986, p.826-831, eng] 41-2296  
Recurring polynyas over the Cosmonaut Sea and the Maud Rise [1987, p.2819-2833, eng] 41-3080
- Conference of the Canadian Technical Asphalt Association, 31st, Vancouver, B.C. Nov. 1986**  
Proceedings [1986, 339p. + append., eng] 41-2201
- Conference of the Comité arctique international: Restoration and Vegetation Succession in Circumpolar Lands, 7th, Reykjavik, Iceland, Sep. 7-13, 1986**  
Program and abstracts [1986, 25p., eng] 41-561
- Conference on Cloud Physics, Chicago, IL, Nov. 15-18, 1982**  
Extended summaries [1982, 587p., eng] 41-1
- Connor, B.**  
Optimum sand specifications for roadway ice control. Final report [1982, 36p., eng] 41-3047  
Performance of bituminous surface treatments in Alaska. Final report [1981, 61p., eng] 41-3046  
Remote frost depth monitoring [1984, 13p., eng] 41-4075  
Use of high float emulsion asphalt in Alaska (Report to the Legislature) [1985, 122p., eng] 41-4001
- Connor, J.J.**  
Numerical modelling of ice-structure interaction [1986, p.431-444, eng] 41-1610
- Conoby, M.J.**  
Experimental and numerical modeling of heat and mass transport in soil subjected to artificial freezing [1987, 209p., eng] 41-3842
- Convegno Glaciologico Italiano, 7th, Bolzano-Val Martello, Italy, Sep. 30-Oct. 2, 1983**  
Problems connected with the fluctuation of alpine glaciers in the last 30 yrs. Proceedings [1985, p.65-214, ita] 41-3174
- Conway, H.**  
Field test to assess snow-slope stability [1986, p.535-537, eng] 41-4310
- Cook, J.D.**  
Detection of high altitude permafrost in Jotunheimen, Norway using seismic refraction techniques: an assessment [1986, p.19-26, eng] 41-1184
- Cook, R.**  
Scattering at mm wavelengths from *in situ* snow [1986, p.1.6.1-1.6.2, eng] 41-95
- Coon, M.D.**  
Forecasting summer ice conditions in the Beaufort Sea [1987, p.371-377, eng] 41-2445
- Cooper, A.P.R.**  
Digital mapping in polar regions from Landsat photographic products: a case study [1986, p.47-50, eng] 41-737  
Digital radio echo-sounding and navigation recording system [1987, p.81-84, eng] 41-4440  
Interface tracking in digitally recorded glaciological data [1987, p.50-54, eng] 41-4434
- Cooper, D.J.**  
White spruce above and beyond treeline in the Arrigetch Peaks region, Brooks Range, Alaska [1986, p.247-252, eng] 41-1868
- Cooper, W.A.**  
Field evidence supporting quantitative predictions of secondary ice production rates [1987, p.1071-1082, eng] 41-3852
- Cormeau, A.**  
Probabilistic theories for the failure of sea ice [1986, p.37-54, eng] 41-1581
- Corotis, R.B.**  
Wood damage accumulation by stochastic load models [1986, p.2402-2415, eng] 41-2222
- Correia, R.M.**  
Pneumatic conveying of ice into deep mines [1987, p.155-167, eng] 41-4329
- Corres, H.**  
Behavior at cryogenic temperatures of steel for concrete reinforcement [1986, p.405-411, eng] 41-2071  
Thermal deformation of loaded concrete at low temperature. 2. Transverse deformation [1986, p.741-748, eng] 41-1999  
Thermal deformation of loaded concrete at low temperature. 3. Lightweight concrete [1986, p.845-852, eng] 41-2001  
Thermal deformation of loaded concrete during thermal cycles from 20 C to -165 C [1984, p.639-644, eng] 41-2003
- Corte, A.E.**  
Delimitation of geocryogenic (periglacial) regions and associated geomorphic belts at 33 deg S.L. Andes of Mendoza, Argentina [1986, p.31-34, eng] 41-3579
- Costard, F.**  
Life and death of a Martian impact crater that underwent thermokarst development [1986, p.123-131, fre] 41-4423
- Cota, G.F.**  
Intracellular photosynthate allocation and the control of Arctic marine ice algal production [1987, p.124-132, eng] 41-3998  
Nutrient fluxes during extended blooms of Arctic ice algae [1987, p.1951-1962, eng] 41-2254
- Cote, D.**  
Northern Information Networking Conference. Final report [1986, 83p., eng] 41-1567
- Cottam, D.A.**  
Large-scale fumigation system for investigating interactions between air pollution and cold stress on plants [1987, p.15-28, eng] 41-2858
- Cotton, W.R.**  
Numerical simulation of the effects of small scale topographical variations on the generation of aggregate snowflakes [1984, p.613-616, eng] 41-4409  
Numerical simulation of the effects of varying ice crystal nucleation rates and aggregation processes on orographic snowfall [1986, p.1658-1680, eng] 41-2500  
Simulation of orographic clouds with a nonlinear, time-dependent model [1982, p.322-324, eng] 41-24  
Three-dimensional simulation of Florida convective clouds—Sensitivity to cloud microphysical processes [1982, p.358-361, eng] 41-34
- Cottrill, A.**  
Esso's ice island shows how Arctic life goes on [1987, p.42-48, eng] 41-2526
- Countermeasures against damage by snowfall on distribution cable arrester**  
Countermeasures against damage by snowfall on distribution cable arrester [1985, p.41-43, jpn] 41-186
- Courchesne, F.**  
Temporal variation in aluminum speciation and concentration during snowmelt [1986, p.231-237, eng] 41-2620
- Courtin, G.M.**  
Thermal index and thermal conductivity of snow and their relationship to winter survival of the meadow vole, *Microtus pennsylvanicus* [1984, p.153-164, eng] 41-1957
- Courville, G.E.**  
Dynamic thermal performance of insulated metal deck roof systems [1986, p.53-63, eng] 41-1379
- Coutermarsh, B.A.**  
Contribution of snow to ice bridges [1987, p.133-137, eng] 41-2414

- Cox, G.P.N.**  
Advances in sea ice mechanics in the USA [1987, p.37-49, eng] 41-2933  
Changes in the salinity and porosity of sea-ice samples during shipping and storage [1986, p.371-375, eng] 41-4291  
Electromagnetic property trends in sea ice, Part 1 [1987, 45p., eng] 41-4368  
Evaluation of the rheological properties of columnar ridge sea ice [1986, p.55-66, eng] 41-1582  
Ice island construction [1983, 8 col., eng] 41-1777  
Mechanical properties of multi-year sea ice. Phase I: Ice structure analysis [1987, 30p., eng] 41-4143  
Modeling the electromagnetic property trends in sea ice and example impulse radar and frequency-domain electromagnetic ice thickness sounding results [1986, p.57-133, eng] 41-2655  
On the profile properties of undeformed first-year sea ice [1986, p.257-330, eng] 41-2663  
Sea ice and the Fairway Rock icefoot [1985, p.25-32, eng] 41-337  
Triaxial testing of first-year sea ice [1986, 41p., eng] 41-2547  
Verification tests for a stiff inclusion stress sensor [1987, p.81-88, eng] 41-3301
- Crabtree, R.D.**  
Radio-echo investigations of Ronne Ice Shelf [1986, p.37-41, eng] 41-735
- Craig, J.H.**  
Chemical fractionation of brine in the McMurdo Ice Shelf, Antarctica [1986, p.307-313, eng] 41-4281
- Craig, D.**  
Oxygen-18 studies of snowmelt runoff in a small Precambrian shield watershed: implications for streamwater acidification in acid-sensitive terrain [1986, p.213-234, eng] 41-2697
- Craig, J.D.**  
Geologic report for the Beaufort Sea planning area, Alaska: Regional geology, petroleum geology, environmental geology [1985, 192p. + maps, eng] 41-694
- Crasey, F.D.**  
Weddell-Scotia Sea marginal ice zone observations from space, October 1984 [1986, p.3920-3924, eng] 41-93
- Crawford, J.**  
Glaciological investigations using the synthetic aperture radar imaging system [1987, p.11-19, eng] 41-4428
- Crawford, M.W.**  
Through the ice mining study—final report [1983, 5 sections + append., eng] 41-3926
- Crawford, W.W.**  
Project ice buster [1986, p.623-643, eng] 41-2681
- Creighton, D.L.**  
Blockage of flow resulting from freezing of liquid introduced into circular tubes located in low-temperature environments [1978, p.37-42, eng] 41-468
- Crichton, W.**  
Polymer concrete mix takes to cold weather [1987, p.32, eng] 41-2525
- Crito, J.F.**  
Model for an icy halo in comets [1985, p.429-442, eng] 41-1717
- Cripps, J.C.**  
Weathering effects: slopes in mudrocks and over-consolidated clays [1987, p.405-445, eng] 41-3044
- Crissman, R.D.**  
HF radar observations of Arctic pack-ice breakup [1986, p.270-275, eng] 41-1509
- Critchlow, K.R.**  
Fate and effects of drilling fluids and cuttings discharges in lower Cook Inlet, Alaska, and on Georges Bank [1984, p.1-388, eng] 41-1782
- Crossdale, K.R.**  
Flow of ice floe against a cylindrical structure [1987, p.365-370, eng] 41-2444  
Ice stress measurements in a rubble field surrounding a caisson-retained island [1986, p.255-262, eng] 41-1597  
Recent developments in ice mechanics and ice loads [1985, p.53-74, eng] 41-666
- Crocker, G.B.**  
Some physical properties of snowcover on evolving first year sea ice [1985, p.84-95, eng] 41-1487
- Crockett, R.N.**  
Exploitation of antarctic minerals [1987, p.121-132, eng] 41-3741
- Crook, A.G.**  
Operational experiences in meteor burst telemetry—eight years of SNOTEL project observations [1986, p.411-418, eng] 41-3906
- Cross, M.**  
Applications of control volume enthalpy methods in the solution of Stefan problems [1985, p.245-275, eng] 41-658
- Crowe, A.**  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. [1986, 138p., eng] 41-2549
- Crowe, O.F.**  
CO2 snow-making process [1983, 10 col., eng] 41-1769
- Crowley, J.D.**  
Bath iron works corporation cold weather operations studies for the CG 47 class cruiser program [1986, p.447-451, eng] 41-947
- Cruikshank, D.P.**  
Methane ice on Triton and Pluto [1985, p.817-827, eng] 41-1740  
Outer solar system materials: ices and color systematics [1985, p.169-181, eng] 41-1704  
Small, icy satellites of Saturn [1985, p.691-697, eng] 41-1731  
Sulfur dioxide ice on Io [1985, p.805-815, eng] 41-1739
- Cudlip, W.**  
Mapping of Amery Ice Shelf, Antarctica, surface features by satellite altimetry [1987, p.183-188, eng] 41-4455  
Observation of a giant antarctic tabular iceberg by satellite radar altimetry [1987, p.458-462, eng] 41-3677  
Seasat altimeter observations of an antarctic "lake" [1987, p.55-59, eng] 41-4435
- Cui, Z.**  
Paleoglacial traces and series of mutiglaciation in the Luojishan Mountain [1986, p.107-118, chij] 41-1458  
Where are the former glacial relics in Guilin area [1986, p.97-106, chij] 41-1457
- Cunning, J.B.**  
Graupel characteristics in relation to the dynamics of Florida cumuli [1982, p.362-365, eng] 41-35
- Currie, B.W.**  
Detection of sea-ice features using K(a)-band radar [1985, p.499-500, eng] 41-1409
- Currie, N.C.**  
Mm wave backscatter from snow on the surface at 35 and 94 GHz [1986, p.6.3.1-6.3.5, eng] 41-98  
Radar backscatter from land, sea, rain and snow at millimeter wave length [1985, p.250-254, eng] 41-1360
- Cussler, E.L.**  
Chemistry of deicing roads: breaking the bond between ice and road [1987, p.15-26, eng] 41-2068
- Cuvellier, C.**  
Thermocapillary free boundaries in crystal growth [1986, p.1-26, eng] 41-826
- Czerwik, Z.**  
Pulse radiolysis study of electrons in frozen alkaline solutions [1986, p.275-283, eng] 41-2811
- Czaplinski, R.D.**  
Fate and effects of drilling fluids and cuttings discharges in lower Cook Inlet, Alaska, and on Georges Bank [1984, p.1-388, eng] 41-1782
- Czys, R.R.**  
Storage effects on ice-forming nuclei measurements [1982, p.127-130, eng] 41-13
- D.F. Dickens Associates, Ltd.**  
Field research spills to investigate the physical and chemical fate of oil in pack ice [1987, 95p. + append., eng] 41-3074
- Da Rosa Martins, I.**  
Contribution to the study of sediments in the Bransfield Strait region [1987, p.127-146, por] 41-3156
- Da Silva, C.P.**  
Effect of climate fluctuations on selected cryospheric parameters [1984, 27p., eng] 41-3421
- Dagesse, D.F.**  
Experimental study of the effect of humidity and temperature variations on the granular disintegration of argillaceous carbonate rocks in cold climates [1984, p.291-298, eng] 41-1231
- Dahl-Jensen, D.**  
Least squares method used in reduction of data from theodolite measurements on fast moving glaciers [1986, p.42-46, eng] 41-736
- Dahl, P.H.**  
Ocean dynamics and acoustic fluctuations in the Fram Strait marginal ice zone [1987, p.435-436, eng] 41-2805
- Dale, J.E.**  
Sea ice breakup and tidal flats processes, Frobisher Bay, Baffin Island [1986, p.168-180, eng] 41-362
- Daley, C.G.**  
Analysis of extreme ice loads measured on USCGC Polar Sea [1984, p.241-252, eng] 41-874  
Dynamic ship/ice impact—results of parametric model testing [1986, p.349-363, eng] 41-1604
- Dallimore, S.R.**  
Ground probing radar investigations of massive ground ice and near surface geology in continuous permafrost [1987, p.913-918, eng] 41-4016  
Observations and predictions of frost heave around a chilled pipeline [1985, 110p., eng] 41-3647
- Daly, C.**  
Snow distribution patterns in the alpine krummholz zone [1984, p.157-175, eng] 41-3139
- Dandekar, B.W.**  
Numerical evaluation of flexible footing settlement into uniform snowcover [1986, p.131-138, eng] 41-1284
- Dane Vose, G.**  
Airborne snow water equivalent measurements over a forested environment using terrestrial gamma radiation [1984, p.101-115, eng] 41-1951
- Danielian, I.U.S.**  
Determining the thermal conductivity coefficient for thawed and frozen grounds [1983, p.20-24, rus] 41-4483
- Energy transfer in soil with nonequilibrium phase transformation** [1986, p.156-161, rus] 41-2558  
**Evaluating the solutions of nonlinear problems on freezing and thawing of moist ground** [1986, p.350-353, rus] 41-2306  
**Project of the experimental Yamberg ice-core dam** [1986, p.183-189, rus] 41-2175  
**Regularity governing thermophysical properties of peat in the Tiumen' region** [1986, p.46-52, rus] 41-600  
**Studying heat and mass transfer in frozen ground around thermopiles** [1986, p.1127-1130, rus] 41-2537  
**Studying the kinetics of changes in phase composition of moisture in the freezing disperse rocks** [1986, p.52-59, rus] 41-3395
- Daniëls, F.J.A.**  
Vegetation of the Angmagssalik District, Southeast Greenland. 4. Shrub, dwarf shrub and terricolous lichens [1982, 78p. + maps, eng] 41-3789
- Daniels, W.B.**  
High-pressure cell for luminescence studies of condensed phases at low temperatures [1986, p.497-498, eng] 41-960
- Danilenko, V.I.**  
Determination of crack resistance of freshwater ice [1985, p.131-136, eng] 41-2972  
**Determining the resistance of fresh water ice to fracturing** [1985, p.135-140, rus] 41-1575
- Daniluk, V.N.**  
Effectiveness of the gradual and selective cuttings in the Bilimbaev spruce forests [1986, p.89-97, rus] 41-2877
- Danilov, I.D.**  
Climate and ground ice in northern West Siberia in the Late Pleistocene-Holocene [1986, p.61-65, rus] 41-106  
Climate and ground ice in the north of Western Siberia in the Late Pleistocene and Holocene [1986, p.303-308, eng] 41-3621  
Dislocations in frozen, ice-containing, Pleistocene deposits of northern western Siberia [1986, p.28-41, rus] 41-2816  
Geocryology—its subject and problems [1986, p.18-26, rus] 41-2082
- Danilova, A.D.**  
Heliogeophysics and the control of natural environments [1986, 192p., rus] 41-652
- Dansgaard, W.**  
Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap [1986, p.361-364, eng] 41-2860
- Danyluk, L.S.**  
Stabilization of fine-grained soil for road and airfield construction [1986, 37p., eng] 41-540
- D'Apollonia, S.J.**  
Numerical model for calculating spatial distribution and mean frequency of iceberg grounding events [1986, p.221-232, eng] 41-3114
- Dauch, J.M.**  
Dry deposition to snow in an urban area [1986, p.297-308, eng] 41-2478  
Wintertime wet and dry deposition in northern Michigan [1986, p.1171-1178, eng] 41-796
- Dashkova, T.E.**  
Peculiarities of determining economic effectiveness of technical equipment in the North [1986, p.188-192, rus] 41-1207
- Dashkovskaya, I.S.**  
Dynamics of radial increment of conifer stands in different forest types of the Central Angara River area [1983, p.82-94, rus] 41-2748  
Influence of climatic factors on radial increment of trees and stands in the central Angara River region [1984, p.49-56, rus] 41-1079
- Dats'ko, P.S.**  
Field studies of stresses in freezing ground in the active layer [1986, p.163-169, rus] 41-2096  
Formation of cryogenic structure in freezing and thawing rocks in active layers of the Yamal Peninsula [1986, p.149-162, rus] 41-2095
- Daughtry, C.S.T.**  
Sun angle, view angle, and background effects on spectral response of simulated balsam fir canopies [1986, p.649-658, eng] 41-2739
- Davenport, A.G.**  
Wind/wave tank tests of drifting iceberg models [1986, p.364-379, eng] 41-1107
- David, P.**  
Avalanche data, 1985-1986 season [1986, p.3-16, fre] 41-3356
- Davidenko, G.A.**  
Protection of the concrete of hydraulic structures from the effects of temperature and moisture [1986, p.293-299, eng] 41-2940
- Davidenko, N.M.**  
Cryogenic factor in the evolution of landscape-geodynamic structures [1986, p.153-165, rus] 41-3496
- Davidenko, V.M.**  
Protection of the concrete of hydraulic structures from the effects of temperature and moisture [1986, p.293-299, eng] 41-2940
- Davidoff, B.**  
Method to verify the presence of a trend in studying spatial variability of soil temperature [1986, p.1122-1127, eng] 41-2475



- Davidovich, N.V.**  
Accounting for the ice formation types in predicting glacier mass balance from given parameters of climatic forecasts [1986, p.125-131, 241-247, eng] 41-1067
- Davidson, C.I.**  
Radioactive cesium from the Chernobyl accident in the Greenland ice sheet [1987, p.633-634, eng] 41-4225  
Scavenging of atmospheric sulfate by Arctic snow [1987, p.871-882, eng] 41-3891
- Davidson, D.**  
Air services support to northern operators [1986, p.279-294, eng] 41-2032
- Davidson, K.**  
MIZEX—a program for mesoscale air-ice-ocean interaction experiments in Arctic marginal ice zones. 8. A science plan for a winter marginal ice zone experiment in the Fram Strait/Greenland Sea: 1987/89 [1986, 53p., eng] 41-3930
- Davidson, K.L.**  
Aerosol size distributions in the marginal ice zone during the 1983 Marginal Ice Zone Experiment [1987, p.6971-6976, eng] 41-4253  
Effect of observed ice conditions on the drag coefficient in the summer East Greenland Sea marginal ice zone [1987, p.6943-6954, eng] 41-4250
- Davidson, L.W.**  
Long-range prediction of Grand Banks iceberg season severity: a statistical approach [1986, 163p., eng] 41-1835
- Davies, D.M.**  
Methanesulphonate in antarctic ice [1986, p.375-379, eng] 41-2503
- Davies, J.N.**  
Glacier-generated earthquakes from Prince William Sound, Alaska [1986, p.367-379, eng] 41-262
- Davis, A.R.**  
Ice/frost detection using millimeter wave radiometry. Final report for period 28 May 1980-31 August 1981 [1981, 55p., eng] 41-4155
- Davis, J.L.**  
Application of time-domain reflectometry to determine the thickness of the frozen zone in soils [1982, 8p., eng] 41-3228  
Ground probing radar investigations of massive ground ice and near surface geology in continuous permafrost [1987, p.913-918, eng] 41-4016
- Davis, M.A.**  
Low-temperature behaviour of high-birefringence fibres [1985, p.703-704, eng] 41-1410
- Davis, P.T.**  
Holocene glacier fluctuations [1987, p.26-28, eng] 41-4098
- Davis, R.M.**  
'Floating-On': advanced environmental technology using Flowtoms for economical transportation systems over difficult 'off-road' terrain [1986, p.679-692, eng] 41-2051
- Davison, A.P.**  
Investigation into the relationship between salt weathering debris production and temperature [1986, p.335-341, eng] 41-1778
- Davison, R.W.**  
Characteristics of two full-depth slab avalanches on Meall Uaine, Glenn Shee, Scotland [1987, p.51-54, eng] 41-3595  
Supply of snow in the Eastern Highlands of Scotland: 1954-5 to 1983-4 [1987, p.42-50, eng] 41-3147
- Davison, S.K.**  
Characteristics of two full-depth slab avalanches on Meall Uaine, Glenn Shee, Scotland [1987, p.51-54, eng] 41-3595
- Davos, Switzerland. Eidgenössisches Institut für Schnee- und Lawinenforschung**  
Snow and avalanches in the Swiss Alps, winter 1984-85 [1986, 172p., ger] 41-2290
- Davy, T.**  
On the spacing and draft distributions for pressure ridge keels [1986, p.10,697-10,708, eng] 41-1009
- Davydova, N.D.**  
Geochemical evaluation of the environmental impact of human activities [1986, p.135-143, rus] 41-4114
- Dawe, B.J.**  
Ice hazard detection with ground wave radar [1986, 84p., eng] 41-4580  
Remote sensing of icebergs by ground-wave Doppler radar [1986, p.276-284, eng] 41-1510
- Dawson, A.G.**  
Glacier-dammed lake investigations in the Hullet Lake area, South Greenland [1983, 24p., eng] 41-3302
- DaXiong, F.**  
Continuous spatial and temporal variations of supercooled water during wintertime mountain storms using a passive microwave radiometer [1984, p.47-50, eng] 41-4371
- Day, S.J.**  
Sulphide erratics applied to subglacial exploration: St. Elias Mountains, British Columbia [1987, p.723-730, eng] 41-4080
- Day, T.**  
Deformation by ice of sediment remanent magnetism [1986, p.78-81, eng] 41-3095
- Relict ice scours on King William Island, N.W.T. [1986, p.64-72, eng] 41-3093**
- Dayton, P.K.**  
Distribution patterns of benthic microalgal standing stock at McMurdo Sound, Antarctica [1986, p.207-213, eng] 41-1015
- De Angelis, M.**  
Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core [1987, p.318-321, eng] 41-2505
- De Grande, G.**  
Ship motion in waterways clogged with broken ice [1986, p.503-571, eng] 41-1615
- De Heering, P.**  
Close range ice hazard detection: Phase 2 [1987, 67p. + appends. (2 vols.), eng] 41-3226
- De Jong, J.J.A.**  
Design and construction of a caisson retained island drilling platform for the Beaufort Sea [1978, p.2111-2120, eng] 41-2126
- De Margerie, S.**  
Operational iceberg trajectory forecasting model for the Grand Banks of Newfoundland [1986, 86p., eng] 41-1836
- Deakins, J.H.**  
Design considerations for a kinetic energy ice penetrating tactical sonobuoy [1986, p.521-547, eng] 41-2675
- Dean, A.M., Jr.**  
Mine detection using non-sinusoidal radar. Part I: Spatial analysis of laboratory test data [1984, 99p., eng] 41-462
- Dean, R.G.**  
Natural hazards and research needs in coastal and ocean engineering [1984, 62p., eng] 41-83
- Dec, S.F.**  
Heats of solution of ethane and propane in water from 0 to 50 °C [1987, p.245-248, eng] 41-3311
- Decker, M.T.**  
Ground-based detection of aircraft icing conditions using microwave radiometers [1986, p.975-982, eng] 41-2302
- Decker, R.A.**  
Continuum mixture theory with an application to turbulent snow, air flows and sedimentation [1986, 110p., eng] 41-2641
- Dedić, O.**  
Ecological factors in the winter service [1985, p.11-16, ger] 41-385
- Dedkov, A.P.**  
Methods of geomorphological field experiments in the USSR [1986, 160p., rus] 41-1197  
Slow hydrothermal movements of soil and ground masses on slopes (creep) [1986, p.77-90, rus] 41-1198
- Dedkov, V.S.**  
Soil cover of the Bilimbaev model forest [1986, p.45-72, rus] 41-2875
- Dedul, A.**  
Snow removal in cities, a big problem also in the Soviet Union [1987, p.18-20, ita] 41-4101
- Deeva, N.M.**  
Reserves and structure of vegetational biomass in Alpine tundras of the northwestern Putorana plateau [1986, p.789-794, rus] 41-1003
- Deformation of a pipeline by frost heave**  
Deformation of a pipeline by frost heave [1987, p.10, eng] 41-2321
- Degrange, G.**  
Sea ice testing in flexure—the importance of shear deformations [1986, p.209-224, eng] 41-1593
- Degtlarenko, T.I.**  
Trends in variations of mountain river runoff in the USSR related to climatic changes [1986, p.78-82, 191-195, rus] 41-4345
- Degtlarev, A.P.**  
Integrated mechanization of earthwork [1987, 335p. (Pertinent p.284-318), rus] 41-3674
- Dehn, W.S.**  
Long-range prediction of iceberg severity in the Labrador Sea [1986, p.355-385, eng] 41-155
- Dehority, D.C.**  
Passive microwave spectral emission from saline ice at C-band during the growth phase [1986, p.840-848, eng] 41-2298
- Deicing/anti-icing fluid—runways and taxiways**  
Deicing/anti-icing fluid—runways and taxiways [1980, 8p., eng] 41-1757
- Deike, R.F.**  
Fencing system [1982, 14 col., eng] 41-1992
- Deikin, B.N.**  
Distribution of ground water naleds in the central BAM zone (from spaceborne photographs) [1986, p.86-94, rus] 41-3520
- Del Rosario Prieto, M.**  
Glacier dam on the Rio Plomo: a cyclic phenomenon [1986, p.73-78, eng] 41-3527
- Delaney, A.J.**  
Model studies of surface noise interference in ground-probing radar [1985, 23p., eng] 41-447  
Morphology, hydraulics and sediment transport of an ice-covered river. Field techniques and initial data [1986, 37p., eng] 41-2612
- Preparation and description of a research geophysical borehole site containing massive ground ice near Fairbanks, Alaska [1987, 15p., eng] 41-3627**
- Short-pulse radar investigations of freshwater ice sheets and brash ice [1986, 10p., eng] 41-594**
- Delisle, C.E.**  
Acid neutralizing capacity of glacial sediments in western Ungava [1986, p.69-85, eng] 41-346
- Della Ventura, A.**  
Development of a satellite remote sensing technique for the study of alpine glaciers [1987, p.203-215, eng] 41-2763
- Satellite monitoring of Alpine glacier fluctuations [1985, p.150-155, ita] 41-3183**
- Dell'Andrea, S.**  
Building yard trials for avalanche protection structures [1986, p.28-36, ita] 41-2235
- Dello Stritto, F.J.**  
Ice and ice management on the Grand Bank [1986, p.561-582, eng] 41-167
- Delmas, R.J.**  
220-year continuous record of volcanic H<sub>2</sub>SO<sub>4</sub> in the antarctic ice sheet [1987, p.671-676, eng] 41-4325  
Antarctic precipitation chemistry [1986, p.249-266, eng] 41-1843
- Relative contributions of tropospheric and stratospheric sources to nitrate in antarctic snow [1986, p.236-249, eng] 41-1754**
- Delsemme, A.H.**  
Sublimation temperature of the cometary nucleus: observational evidence for H<sub>2</sub>O snows [1985, p.367-387, eng] 41-1712  
What we do not know about cometary ices: a review of the incomplete evidence [1985, p.505-517, eng] 41-1721
- DeMaster, D.J.**  
Biogenic-silica accumulation in the Ross Sea and the importance of antarctic continental-shelf deposits in the marine silica budget [1986, p.2099-2110, eng] 41-458
- Dement'ev, A.A.**  
Ice cover of the North European Basin as an indication of natural climatic cycles [1986, p.122-127, rus] 41-119
- Dement'ev, B.V.**  
Water in regolith from Mare Crisium (Luna 24)? [1978, p.285-288, rus] 41-3208
- Dement'ev, M.V.**  
Using snow reserve coefficients in calculating maximum annual snow reserves in the Verkhnyaya Katun' River basin [1986, p.100-105, rus] 41-1967
- Dement'ev, V.A.**  
Passing spring meltwater when pipes are clogged by naleds [1986, p.16-17, rus] 41-511
- Dement'eva, O.V.**  
Some modeling problems related to the theory of naleds [1982, p.162-165, rus] 41-1443
- Demers, S.**  
Nutrient limitation of the bottom-ice microalga biomass (southeastern Hudson Bay, Canadian Arctic) [1986, p.969-982, eng] 41-1473
- Demich, G.**  
Calcium magnesium acetate research in Washington State [1985, p.8-12, eng] 41-655
- Demin, A.I.**  
Requirements for thermotechnical properties of lightweight concretes for one-layer enclosures for the North [1986, p.42-53, rus] 41-2919  
Thermal and technical properties of light concretes of one-layer enclosures designed for the North [1986, p.36-37, rus] 41-1889
- DeMott, P.J.**  
Characteristics of subcooled liquid clouds from mountaintop observations and measurements [1982, p.491-494, eng] 41-65  
Comparison of the trace constituent composition of unrimed and rimed snow crystals [1982, p.61-62, eng] 41-4  
Development of ice crystal concentrations in stably stratified orographic cloud systems [1984, p.191-194, eng] 41-4390
- Inventory of ice crystal concentrations in a series of stable orographic cloud systems [1982, p.584-587, eng] 41-71**
- Kinetics of ice crystal formation in "dynamic" cloud conditions [1984, p.189-190, eng] 41-4389**
- Study of ice crystal formation in a stably stratified orographic cloud [1982, p.488-490, eng] 41-64**
- Denisenko, V.A.**  
Lift-slab method of erecting a 30-story building in Krasnoyarsk [1986, p.14-16, rus] 41-888
- Denisov, G.V.**  
Thermal regime of cryogenic soils during basic improvement of meadows [1985, p.14-26, rus] 41-255
- Denisov, I.U.M.**  
Mathematical modeling of hydrometeorological processes [1986, 84p., rus] 41-543
- Denisov, S.I.**  
Methods of determining optimal numbers of artificial Earth satellites for collecting information from automatic hydrometeorological stations [1984, p.85-88, rus] 41-559

- Denisova, T.I.A.**  
Influence of atmospheric circulation on thermal regime and ablation of the Tuuyksu Glacier [1986, p.29-34, 148-152, rus] 41-4336  
Influence of large-scale atmospheric processes on the fluctuations of glaciers [1986, p.52-58, 179-185, eng] 41-1055
- Denner, W.**  
Arctic environmental support [1986, p.429-434, eng] 41-944
- Denner, W.W.**  
Role of sea ice motion in ice penetration [1986, p.135-153, eng] 41-2656
- Dent, J.D.**  
Comparison of experimental and computer modeling of snow-block impact on structures [1986, p.321-324, eng] 41-4283
- Denton, G.H.**  
Global ice-sheet system interlocked by sea level [1986, p.3-26, eng] 41-611  
Potential influence of floating ice shelves on the climate of an ice age [1986, p.509-513, eng] 41-2801  
Radiocarbon chronology of the last glaciation in McMurdo Sound, Antarctica [1985, p.59-61, eng] 41-2625
- Denyes, B.B.**  
Measurement and maintenance of runway friction at Canadian airfields [1987, p.949-979, eng] 41-4049
- Der Klugeghian, A.**  
Limit state probabilistic design of offshore Arctic pipelines [1987, p.115-123, eng] 41-4632
- Derbyshev, A.S.**  
Role of transportation in the development of northern regions with limited access [1986, p.60-63, rus] 41-1203
- Derecki, J.A.**  
Record St. Clair River ice jam of 1984 [1986, p.1182-1194, eng] 41-2114
- Deriugin, A.A.**  
Forest effect on snow reserves and melting in the central taiga of northern Europe [1986, p.11-16, rus] 41-2598
- Deriugin, A.G.**  
Strength of granular ice [1986, p.129-134, rus] 41-2165  
Strength of natural and artificially built-up ice on an ice crossing over the Lena River [1986, p.219-222, rus] 41-138  
Strength of reinforced-ice materials [1986, p.135-139, rus] 41-2166
- Deriugin, E.P.**  
Using dry, low-cement, rolled concrete mix for construction of the Kureyskaya hydroelectric power plant [1986, p.31-35, rus] 41-2867
- Derouet, P.R.J.**  
Device for detecting and preventing the formation of ice on contoured surfaces [1985, 6 col. + 3 sheets, eng] 41-2499
- Derruau, M.**  
Periglacial morphology of volcanic outcrops [1986, p.47-62, fre] 41-3580
- Deshler, T.**  
Contact ice nucleation by submicron atmospheric aerosols [1982, p.111-114, eng] 41-9
- Deshler, T.L.**  
Ice crystal and ice nucleus measurements in cap clouds [1982, p.333-334, eng] 41-27
- Desiatova, G.I.**  
Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes [1986, p.93-97, rus] 41-2720
- Designing for automotive corrosion prevention**  
Designing for automotive corrosion prevention [1978, 132p., eng] 41-377
- Deslauriers, P.C.**  
Behavior of the Bouchard No.65 oil spill in the ice-covered waters of Buzzards Bay [1978, p.267-276, eng] 41-2124
- Determann, J.**  
Borehole evidence for a thick layer of basal ice in the central Ronne Ice Shelf [1987, p.318-319, eng] 41-3640
- Detwiler, R.L.**  
Through the ice mining study - final report [1983, 5 sections + append., eng] 41-3926
- Deviatitsil'nyi, A.S.**  
Problems in automation of geophysical investigations. Collection of works [1985, 162p., rus] 41-3543
- Devine, E.A.**  
Arctic ice impact assessment for naval surface combatants [1986, p.297-347, eng] 41-939
- Dewez, V.**  
Morphology, genesis and temporal context of the Aishihik pingo (SW Yukon) [1985, p.291-298, fre] 41-2761
- DeWitt, K.J.**  
Enthalpy method applied to phase change problems in arbitrarily shaped regions [1985, p.194-205, eng] 41-3339
- Dewynne, J.N.**  
Integral formulations and bounds for two phase Stefan problems initially not at their fusion temperature [1986, p.201-228, eng] 41-2366
- Dexter, L.**  
Avalanche hazard zoning in Vail, Colorado: the use of scientific information in the implementation of hazard reduction strategies [1987, p.157-168, eng] 41-4127
- Dexter, L.L.**  
Aspect and elevation effects on the structure of the seasonal snowcover in Colorado [1987, 250p., eng] 41-3800
- Dey, B.**  
Summer 1979: ice climatology of the Canadian Arctic [1985, p.25-33, eng] 41-1481  
Surveillance of year-round shipping routes in the Canadian Arctic: a challenge to the remote sensing community [1985, p.237-242, eng] 41-1499
- D'Hendecourt, L.B.**  
Evolution of ices from interstellar space to the solar system [1985, p.185-204, eng] 41-1705
- Dhir, M.P.**  
Study on the effect of temperature variations on the bonding of concrete overlays [1984, p.172-179, eng] 41-2073
- Dhir, R.**  
Durability of concrete with a superplasticizing admixture [1987, p.741-764, eng] 41-3704
- D'kachova, E.A.**  
Geologic and economical evaluation of oil deposits under extreme climatic conditions [1987, 108p., rus] 41-2961
- D'ikonov, V.V.**  
Impact of wheeled vehicles on trees and soil cover during forest thinning in Karelia [1986, p.137-146, rus] 41-2379
- Diatlova, I.N.**  
Maximum southward advance of the Late Pleistocene ice sheet of the Kara center [1986, p.154-157, rus] 41-125
- Dibbern, J.S.**  
Feasibility report: operation of light air cushion vehicle at McMurdo Sound, Antarctica [1987, 139p., eng] 41-2257
- Dick, R.A.**  
Vehicular transport at McMurdo Station, Antarctica [1986, 31p., eng] 41-638
- Dick, R.A.**  
Arctic ship technology: the state of the art—1986 [1987, 91p., eng] 41-4582
- Dickman, M.**  
Development of arctic marine technology over the last ten years [1986, p.519-536, eng] 41-1616  
Evaluation and definition of the extent of superstructure icing as it may relate to ship safety and operations for the east coast of Canada [1986, 106p., eng] 41-3374
- Dickman, M.**  
Isotopic composition and origin of lacustrine brines in the Arctic [1987, p.210-216, eng] 41-4078  
Limnology of Garro Lake, NWT, Canada [1987, p.531-549, eng] 41-3854
- Dieckmann, G.**  
Biogenic and mineral inclusions in a green iceberg from the Weddell Sea, Antarctica [1987, p.31-33, eng] 41-1975
- Diemand, D.**  
Design, development and deployment of instrument packages to monitor the motion of glacial ice masses at sea [1986, p.225-236, eng] 41-1594  
Iceberg splitting and its implications for deterioration modelling [1986, p.429-440, eng] 41-158  
On the splitting of icebergs—natural and induced [1987, p.379-385, eng] 41-2446
- Diener, C.J.**  
Initial assessment of the 600-gallon-per-hour Reverse Osmosis Water Purification Unit. Field water supply on the winter battlefield [1986, 6p., eng] 41-529
- Dijkman, J.F.**  
Non-isothermal and transient flow of molten polymer in an open rectangular cavity [1986, p.1751-1754, eng] 41-3294
- Dikarevskii, V.S.**  
Water protection structures at railroads [1986, 211p. (Per-tinent p.123-211), rus] 41-517
- Dikikh, A.N.**  
Regime of glaciers in central Tien Shan [1986, 136p., rus] 41-3805
- Dilley, J.F.**  
Evaluation of simple analytical solutions for the prediction of freeze-up time, freezing, and melting [1986, p.1727-1732, eng] 41-3291
- DiNapoli, F.R.**  
Science program of the FRAM experiments in the Eastern Arctic Ocean [1985, p.420-428, eng] 41-221
- Ding, L.**  
New progress of glacier inventory in Tianshan Mountains [1986, p.167-170, chi] 41-1464
- Ding, Y.**  
Application of (14)C dating to the studies of glacial geology and geocryology [1986, p.159-165, chi] 41-1463
- Dionne, J.C.**  
Erratic boulders of stromatolitic dolomite along the St. Lawrence Estuary [1986, p.93-98, fre] 41-2708
- Dirnbock, G.**  
Winter service in Steiermark, Austria [1985, p.17-21, ger] 41-386
- Diunin, A.K.**  
Methods of calculating snow transfer volumes in artificial snow accumulation during snowstorms [1986, p.155-160, rus] 41-1660  
Protection of roads from snow avalanches [1987, 61p., rus] 41-3734
- Diurgenov, M.B.**  
Computations of mass balance in glacier systems [1986, p.8-15, 144-148, eng] 41-1047
- DiVita, S.**  
Survivability of Army fiber optics systems [1981, p.110-117, eng] 41-583
- Dixon, C.**  
Man vs. McKinley [1986, p.2-8, eng] 41-1841
- Dixon, C.A., Jr.**  
CRTC maintenance—beating the odds [1986, p.16-18, eng] 41-1839
- Dixon, J.C.**  
Wind-chill indices—a review [1987, p.1-17, eng] 41-3576
- Djurfeldt, L.**  
On the response of the fjord Gullmaren under ice cover [1987, p.1557-5167, eng] 41-3345
- Dmitrienko, G.V.**  
Winter concreting at the Bol'shoy Almaatinskiy Channel [1985, p.18-19, rus] 41-2552
- Dmitrieva, V.A.**  
Influence of forestry and forest complexes on river runoff [1986, p.71-75, rus] 41-1368
- Donke, C.S.M.**  
Antarctic ice and rocks [1987, p.138-189, eng] 41-3532  
Imaging subglacial topography by a synthetic aperture radar technique [1987, p.170-175, eng] 41-4453  
Implications of the form of the flow law for vertical velocity and age-depth profiles in polar ice [1986, p.366-370, eng] 41-4290
- Dobriak, V.A.**  
Radio-echo investigations of Ronne Ice Shelf [1986, p.37-41, eng] 41-735  
Some aspects of the flow of the Ronne Ice Shelf [1987, p.75-98, eng] 41-3275
- Dobrocky, Satech Ltd.**  
Wave climate study, northern coast of British Columbia [1987, 93p., eng] 41-4530
- Dobromyslov, A.I.A.**  
Water supply and sewage disposal in the Yamal Peninsula [1987, p.8-9, rus] 41-3935
- Dobroumov, B.M.**  
Hydrology of the Baykal Amur Railroad area [1986, 135p., rus] 41-420  
Influence of economic activities on river water resources and regime in the BAM zone [1986, p.84-93, rus] 41-424  
Structure of the water balance of river drainage basins in the permafrost zone [1986, p.326-330, eng] 41-1891
- Dobrovol'skaia, N.G.**  
Microflora of alpine landscapes in western Tien Shan and its role in biochemical weathering (the case of the Sukoksai River basin) [1985, p.77-81, rus] 41-4562
- Dobrovol'skaia, T.G.**  
Peculiarities of microbe associations in the Far North and Pamir highlands [1986, p.12-13, rus] 41-3540
- Dobshits, L.M.**  
Frost resistance criteria of cellular, autoclave-hardened concretes [1986, p.31-32, rus] 41-1884
- Dodin, V.Z.**  
Organization of construction under special environmental and climatic conditions. Construction manual [1986, 255p., rus] 41-2862
- Doe, W.W., III**  
Bank conditions and erosion along selected reservoirs [1987, p.143-154, eng] 41-2495
- Doiban, V.A.**  
Determining the economic effectiveness of investments in the Arctic Fleet [1985, p.6-10, rus] 41-488
- Doktorov, I.P.**  
Possibility of using the transient processes sounding method in geocryological mapping [1986, p.144-153, rus] 41-3495
- Dokukin, M.D.**  
Mudflow formation and transformation processes in the Gerkhozansu River basin [1985, p.58-71, rus] 41-845
- Dolenko, P.D.**  
Calculated bases for winter concreting technology for construction of buildings of rectangular cross sections [1986, p.118-122, rus] 41-907
- Dolgin, I.M.**  
Climate of Antarctica. Papers presented at the All-Union Symposium on the Study of the Climate of Antarctica [1986, 213p., eng] 41-3948
- Dollfus, A.**  
Ices in the solar system; proceedings of the workshop, 1984 [1985, 954p., eng] 41-1693
- Domaschuk, L.**  
Effect of hydrostatic stress on creep of a frozen sand [1987, p.119-124, eng] 41-2412
- Dombrovskii, G.A.**  
Underground storage of petroleum products in the Far North [1983, p.107-109, rus] 41-520
- Domes, H.**  
Mössbauer study of short range order in frozen aqueous solutions of Fe(CIO4)2 [1986, p.7294-7300, eng] 41-2108

- Dosina, S.M.**  
Temporal air-temperature structure in the Antarctic [1981, p.40-44, rus] 41-2011
- Donnelly, R.**  
Four-element CODAR beam forming [1986, p.296-303, eng] 41-4179
- Donov, A.A.**  
Methods of dealing with icing problems on water intakes [1987, p.12-14, rus] 41-3936
- Doolittle, J.H.**  
Development of an automatic geophysical observatory [1985, p.229-231, eng] 41-3326
- Dorman, B.A.**  
Computerized simulation of artificial seeding of mixed stratified clouds containing crystals of different forms [1986, p.3-16, rus] 41-1555
- Dorofeev, I.V.**  
Applying satellite information to studying distribution of discontinuous permafrost (the case of the Aldan Plateau) [1986, p.55-59, rus] 41-3518
- Dorogokupets, S.A.**  
Possible role of standing waves in the dynamics of the ice sheet of the Weddell Sea [1986, p.90-93, eng] 41-3681
- Dörr, R.**  
Time-dependent settlement behavior of foundations in antarctic snow, firn, and ice at Georg von Neumayer and Filchner Stations [1984, 124p., ger] 41-1272
- Dosov, V.N.**  
Photo-control tie of the SMP-32 to the MSU-S data and some reflection spectra characteristics of natural objects [1985, p.57-66, rus] 41-1040
- Dost, S.**  
Nonlinear constitutive model for ice [1985, p.307-321, eng] 41-1357
- Dowd, T.**  
New instrument for determining strength profiles in snow cover [1986, p.299-301, eng] 41-690
- Dowdeswell, E.K.**  
Contemporary pollen deposition and the distribution of *Betula glandulosa* at the limit of low arctic tundra in southern Baffin Island, N.W.T., Canada [1985, p.279-287, eng] 41-1249
- Dowdeswell, J.A.**  
Digital mapping in polar regions from Landsat photographic products: a case study [1986, p.47-50, eng] 41-737  
Digital mapping of the Nordaustlandet ice caps from airborne geophysical investigations [1986, p.51-58, eng] 41-738  
Distribution and character of sediments in a tidewater glacier, southern Baffin Island, N.W.T., Canada [1986, p.45-56, eng] 41-1187  
Late Quaternary chronology for the Watts Bay area, Frobisher Bay, southern Baffin Island, N.W.T., Canada [1984, p.311-320, eng] 41-1233  
Multi-sensor approach to the interpretation of radar altimeter wave forms from two Arctic ice caps [1987, p.60-68, eng] 41-4436  
Processes of glacialine sedimentation [1987, p.52-90, eng] 41-4132  
Surface topography of large ice masses from Landsat imagery [1987, p.16-23, eng] 41-3591
- Downes, M.T.**  
Sources of organic nitrogen, phosphorus and carbon in antarctic streams [1986, p.215-225, eng] 41-613
- Doyle, P.**  
Experiences with High Arctic offstrip aircraft operations [1986, p.495-511, eng] 41-2041
- Doyle, R.**  
Bergy-bit motion due to wind, wave, current and Coriolis forces [1984, p.182-198, eng] 41-1959
- Dozier, J.**  
Recent research in snow hydrology [1987, p.153-161, eng] 41-3509  
Snow mapping and classification from Landsat thematic mapper data [1987, p.97-103, eng] 41-4443
- Drabkin, V.V.**  
Interpreting satellite scanning images of medium resolution for studying ice conditions in the Baltic Sea [1986, p.223-227, rus] 41-707
- Drake, B.**  
Cold weather concrete [1987, p.6, eng] 41-3784
- Drake, J.J.**  
Abnormally enriched elemental concentrations in urban snow [1985, p.255-261, eng] 41-1501  
Spatial analysis of snow- and rain-generated highflows in southern Ontario [1987, p.140-149, eng] 41-4076
- Dransfield, J.**  
Durability of concrete with a superplasticizing admixture [1987, p.741-764, eng] 41-3704
- Drapeau, G.**  
Influence of drifting ice on the mineralogic distribution of the sand fraction of the surficial sediments from the coastal zone in the Trois-Pistoles region, Quebec [1985, p.51-56, fre] 41-2286
- Dreier, N.N.**  
Main results of mapping glacio-nival systems for the World Atlas of Snow and Ice Resources [1986, p.111-116, eng] 41-751
- Dreschhoff, G.A.M.**  
Nitrate flux on the Ross Ice Shelf, Antarctica, and its relation to solar cosmic rays [1986, p.1264-1267, eng] 41-2019  
Nitrate variability in South Pole and Ross Ice Shelf snow and firn [1985, p.68-69, eng] 41-2629
- Drewry, D.**  
Flow and thickness of Riiser-Larsenisen, Antarctica [1986, p.5-22, eng] 41-4093  
Glacial geologic processes [1986, 276p., eng] 41-963
- Driedger, C.**  
Glacier volume estimation on Cascade volcanoes—an analysis and comparison with other methods [1986, p.59-64, eng] 41-739
- Driedger, C.L.**  
Ice volumes on Cascade volcanoes: Mount Rainier, Mount Hood, Three Sisters, and Mount Shasta [1986, 28p., eng] 41-4638
- Driessen, J.M.**  
Thermocapillary free boundaries in crystal growth [1986, p.1-26, eng] 41-826
- Drinkwater, K.F.**  
Physical oceanography of Hudson Strait and Ungava Bay [1986, p.237-264, eng] 41-2596
- Drinkwater, M.R.**  
Multi-sensor approach to the interpretation of radar altimeter wave forms from two Arctic ice caps [1987, p.60-68, eng] 41-4436
- Drinnan, R.W.**  
Options for treatment and disposal of oil-based mud cuttings in the Canadian Arctic [1987, 80p. + append., eng] 41-4532
- Driscoll, C.T.**  
Concentration and flux of solutes from snow and forest floor during snowmelt in the West-Central Adirondack region of New York [1987, p.209-224, eng] 41-3404  
Sources of acidity during snowmelt at a forested site in the west-central Adirondack Mountains, New York [1987, p.99-108, eng] 41-4315
- Dror, J.**  
Amorphous water ice and its ability to trap gases [1987, p.2427-2435, eng] 41-3575
- Drozov, D.S.**  
Possibilities of landscape indication in engineering-geological surveys of southern Central Yakutia [1986, p.85-96, rus] 41-3489  
Space variations in engineering-geological properties of Quaternary deposits in central Yakutia [1986, p.66-74, rus] 41-2821
- Drozovskaya, N.F.**  
Forecasting wet snow avalanches from meteorological data [1986, p.32-39, rus] 41-773  
Glaciology of mountainous regions [1986, 136p., rus] 41-769
- Drozovskii, K.I.**  
Reinforced concrete plating for bridge reconstructions [1985, p.5-7, rus] 41-507
- Drozowski, E.**  
On the effects of bedrock protuberance upon the depositional and relief-forming processes in different marginal environments of Spitsbergen glaciers [1985, p.397-413, eng] 41-2192
- Druez, J.**  
Atmospheric icing load measurements on a cable using the end tension [1987, p.131-141, eng] 41-4490  
Mechanical properties of atmospheric ice [1986, p.67-74, eng] 41-1305
- Dubikov, G.I.**  
Regularities governing the salinity of frozen marine deposits [1986, p.14-27, rus] 41-2815  
Using stable isotopes in studying ground ice [1986, p.92-97, rus] 41-1112
- Dubinchuk, V.T.**  
Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985) [1985, 259p., rus] 41-3534
- Dubovitskii, I.U.A.**  
High-vacuum seal for low temperatures [1987, p.950-951, eng] 41-3158
- Dubovtsev, V.F.**  
Ice cover and navigation conditions in the Arctic [1986, p.176-178, rus] 41-1665
- Dubreuil, M.A.**  
Problems of determining snow albedo for the High Arctic [1984, p.379-386, eng] 41-4535
- Duckworth, G.L.**  
Acoustic array sensor tracking system [1985, p.464-471, eng] 41-229
- Dufresne, A.**  
Speciation of aluminum in different compartments of a drainage basin during snowmelt [1985, p.58-68, eng] 41-1485  
Temporal variation in aluminum speciation and concentration during snowmelt [1986, p.231-237, eng] 41-2620
- Dugarov, V.I.**  
Physical properties and regimes of meadow-chernozem cryogenic soils of the Buryat SSR [1986, 137p., rus] 41-1045
- Dugartsyrenov, A.V.**  
Calculation of parameters of the process of artificial freezing of ground around a cylindrical cavity, allowing for thermal diffusion of moisture [1986, p.21-24, rus] 41-3770
- Dulshenalliev, M.**  
Influence of thermoinsulative layers on temperature regime of road pavements [1984, p.140-145, rus] 41-786
- Dujmovic, S.**  
Fluid flow and particle trajectories around simple bodies: impact of snowflakes on car windshields [1987, p.149-154, eng] 41-2762
- Dunbar, M.J.**  
Arctic seas that never freeze [1987, p.50-53, eng] 41-3149
- Dunbar, N.W.**  
Re-interpretation of glaciovolcanic interaction at Mount Takahe and Mount Murphy, Marie Byrd Land, Antarctica [1985, p.57-59, eng] 41-2624
- Dunbar, R.B.**  
Vertical sediment flux beneath annual sea ice, McMurdo Sound, Antarctica [1985, p.109-111, eng] 41-2950
- Dungey, M.J.**  
72-year Lake Michigan region snow climatology [1982, p.45-48, eng] 41-2
- Dunlay, J.B.**  
Heat pipe deicing apparatus [1981, 6 col., eng] 41-1673
- Dunn, B.**  
Rope-stretching iceberg arrestor [1986, p.469-478, eng] 41-1613
- Dunwiddie, P.W.**  
Dendrochronological and palynological observations on *Populus balsamifera* in northern Alaska, U.S.A. [1985, p.271-277, eng] 41-1248
- Dunwoody, A.B.**  
Ice alert levels for Arctic operations [1987, p.41-46, eng] 41-2400
- Durell, G.**  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 1. Laboratory tests on soils from Winchendon, Massachusetts, test sections [1986, 70p., eng] 41-593  
Triaxial testing of first-year sea ice [1986, 41p., eng] 41-2547
- Durell, G.D.**  
Resilient modulus of freeze-thaw effected granular soils for pavement design and evaluation. Part 3. Laboratory tests on soils from Albany County Airport [1987, 36p., eng] 41-2942
- Dürr, S.**  
Tracing faecal pollution by coprostanol and intestinal bacteria in an ice-covered Finnish lake loaded with both industrial and domestic sewage [1986, p.131-149, eng] 41-2477
- Durham, W.B.**  
Rheologies of H<sub>2</sub>O ices I(h), II, and III at high pressures: a progress report [1985, p.89-107, eng] 41-1699
- Durouze, C.**  
Secondary ice multiplication by "splintering" in low stratocumulus clouds [1984, p.195-198, eng] 41-4391
- Duthweiler, F.C.**  
Grounded ice island—field and laboratory research. Final report [1976, 26p. + append., eng] 41-3569  
Grounded ice island—field and laboratory research interim report [1986, 29p. + 3 append., eng] 41-3422
- Dutt, G.S.**  
Convective loop heat losses in buildings [1986, p.751-760, eng] 41-1388
- Duval, P.**  
Long-term climatic changes indicated by crystal growth in polar ice [1987, p.62-64, eng] 41-2750
- Dvore, D.**  
Numerical modeling of optically significant characteristics of falling snow [1983, p.78-85, eng] 41-2314
- Dvorkin, L.I.**  
Criteria of concrete frost resistance [1986, p.105-109, rus] 41-3665  
Reducing the amount of cement and fuel used in the production of prefabricated reinforced concrete [1985, 99p. (Pertinent p.50-69), rus] 41-650
- Dvornikova, L.L.**  
Changes in chemical composition of meltwater in areas of intensive human activities [1986, p.60-68, rus] 41-3210
- Dworkin, L.U.**  
Survivability of Army fiber optics systems [1981, p.110-117, eng] 41-583
- Dyer, A.**  
Acoustic survey and glacial history of Adams Lake, outer Nachvak Fiord, northern Labrador [1987, p.101-110, eng] 41-4011
- Dyer, F.B.**  
Radar backscatter from land, sea, rain and snow at millimeter wave length [1985, p.250-254, eng] 41-1360
- Dyer, I.**  
Ocean dynamics and acoustic fluctuations in the Fram Strait marginal ice zone [1987, p.435-436, eng] 41-2805
- Dyer, R.M.**  
Classification of ambiguous ice particle shadowgraphs by consensus [1985, p.675-679, eng] 41-3218  
Observed changes in ice crystal type in thick stratiform clouds [1982, p.201-202, eng] 41-15

- Dylla, N.V.**  
Structure of the basic spruce forest in southern taiga [1986, p.6-22, rus] 41-2346
- Dymant, A.N.**  
Field studies of the polymer cavitation-resistant coatings of the Bratsk dam spillway [1985, p.58-63, rus] 41-433
- Dyrness, C.T.**  
Early results of the Rosie Creek Fire Research Project 1984 [1985, 46p., eng] 41-570  
Forest ecosystems in the Alaskan taiga—a synthesis of structure and function [1986, 230p., eng] 41-1898
- Dythe, K.B.**  
Big waves from polar lows [1986, p.297-309, eng] 41-1812
- Dzhavakhishvili, A.I.**  
Snow runoff of the Transcaucasian highland [1985, p.545-547, rus] 41-1624
- Dzhumashev, U.R.**  
Engineering and geological investigations of saline soils [1986, 245p., rus] 41-996
- Dzuba, V.V.**  
Genetic types of snow avalanches in Dzhungarskiy Altai [1986, p.186-190, rus] 41-132  
Methods of compiling maps of the factors affecting avalanche formation in areas outside the USSR for the World Atlas of Snow and Ice Resources [1986, p.81-86, rus] 41-1643  
Methods of compiling medium-scale maps of genetic avalanche types (exemplified by the northern macroslope of Dzhungarskiy Altai) [1986, p.206-211, rus] 41-136
- Eakes, J.**  
Exhaust fans for a cold climate [1986, p.21-22, eng] 41-2966
- Eakins, G.R.**  
Alaska's mineral industry, 1985 [1986, 68p., eng] 41-569
- Eastern Snow Conference**  
Proceedings of the 41-st annual Eastern Snow Conference, Washington, D.C., June 7 and 8, 1984 [1984, 248p., eng] 41-1941  
Proceedings of the 42nd annual Eastern Snow Conference, Montreal, June 6 and 7, 1985 [1985, 303p., eng] 41-1479
- Eaton, F.D.**  
Removal processes of aerosols in ice fog [1982, p.57-60, eng] 41-3
- Eaton, R.A.**  
Engineering surveys along the Trans-Alaska Pipeline [1986, 85p., eng] 41-799  
Summary of proper cold weather pavement repair methods [1987, p.1013-1027, eng] 41-4051
- Ebersole, J.F.**  
Obscuration by helicopter-produced snow clouds [1983, p.94-99, eng] 41-2317  
Visible and infrared transmission through snow [1983, p.90-93, eng] 41-2316
- Echard, J.D.**  
Mm wave backscatter from snow on the surface at 35 and 94 GHz [1986, p.6.3.1-6.3.5, eng] 41-98
- Echelmeyer, K.**  
Direct observation of basal sliding and deformation of basal drift at sub-freezing temperatures [1987, p.83-98, eng] 41-3601  
Rheology of ice II and ice III from high-pressure extrusion [1986, p.693-696, eng] 41-1261
- Echelmeyer, K.A.**  
Stress-gradient coupling in glacier flow: I. longitudinal averaging of the influence of ice thickness and surface slope [1986, p.267-284, eng] 41-688  
Stress-gradient coupling in glacier flow: II. longitudinal averaging in the flow response to small perturbations in ice thickness and surface slope [1986, p.285-298, eng] 41-689  
Stress-gradient coupling in glacier flow: IV. Effects of the "T" term [1986, p.342-349, eng] 41-4286
- Echert, D.C.S.**  
Ice penetration drill/anchor using ultrahigh-pressure water-jets [1986, p.605-617, eng] 41-2679
- Eck, R.W.**  
Potential for use of natural brines in highway applications [1985, p.1-8, eng] 41-654
- Eckert, E.G.**  
Fine structure, internal waves, and intrusions in the marginal ice zone of the Greenland Sea [1987, p.6903-6910, eng] 41-4246
- Eckhardt, J.R.**  
Satellite data input to Windy Gap computerized streamflow forecasting model [1986, p.349-354, eng] 41-3905
- Eddleman, L.E.**  
Phytodaphnic relationships in alpine tundra of north-central Colorado, U.S.A. [1984, p.343-359, eng] 41-1235
- Eden, J.**  
Effect of water content on the dark and radiation induced microwave conductivity of frozen gelatin gels [1987, p.51-56, eng] 41-2807
- Edgecombe, M.**  
Manoeuvring tests in ice aboard USCGC *Polar Star* in Antarctica, 1985 [1986, 44p. + appends., eng] 41-3373
- Edwards, A.C.**  
Effect of freeze/thaw on gaseous nitrogen loss from upland soils [1986, p.86-91, eng] 41-1441
- Edwards, D.L.S.**  
Summary report: drilling fluid use and waste discharge in arctic marine waters north of 60 deg for 1983 [1986, 38p., eng] 41-597  
Summary report: drilling fluid use and waste discharge in arctic marine waters north of 60 deg for 1984 [1986, 47p., eng] 41-598
- Edwards, K.**  
Landsat multispectral images of Antarctica applied to mapping and glaciology [1985, p.256-259, eng] 41-3327
- Edwards, M.E.**  
Dendrochronological and palynological observations on *Populus balsamifera* in northern Alaska, U.S.A. [1985, p.271-277, eng] 41-1248
- Edwards, N.C., Jr.**  
Side-looking airborne radar detection and identification of icebergs [1986, p.546-554, eng] 41-165
- Effects of climate on combat in European Russia**  
Effects of climate on combat in European Russia [1986, 80p. + graphs, eng] 41-2063
- Efimov, V.N.**  
Calculating frost resistance of road pavements [1985, p.18-19, rus] 41-508
- Efimov, B.A.**  
Skidding coefficient of caterpillar rippers on frozen ground and hard rocks [1978, p.47-49, rus] 41-1319
- Efimov, S.S.**  
Moisture in hygroscopic materials [1986, 160p., rus] 41-1044
- Efimov, V.B.**  
Study of ice covers by radiophysical means from aerospace platforms [1985, p.394-399, eng] 41-1892
- Efremov, A.L.**  
Human activities impact on the biological activity of mountain soils [1986, p.41-45, rus] 41-456
- Efremov, A.P.**  
Improving coal mining technology by using "Sputnik" supports in the Sangarskaya mine [1986, p.30-33, rus] 41-4552
- Efremov, N.A.**  
Stability of hydraulically built-up construction sites under dynamic loads [1986, p.29-31, rus] 41-1529
- Efremov, S.P.**  
Development of swamps and paludal forests in western Siberia [1986, p.26-29, rus] 41-3743
- Egan, W.G.**  
Airborne observations of polarization and photometry of terrestrial surfaces [1986, p.501-510, eng] 41-3988
- Egger, J.**  
Topographic Rossby waves over Antarctica [1987, p.110-115, eng] 41-3134
- Eglit, M.E.**  
Mathematical modeling for determining avalanche spread boundaries [1986, p.78-81, rus] 41-1642
- Egorov, E.N.**  
Tribotechnical properties of fluoroplastic-4 and super-high molecular polyethylene in contact with ice and snow [1984, p.8-10, rus] 41-4505
- Egorov, V.V.**  
One hundred years of genetic pedology [1986, 276p., rus] 41-521
- Egorova, V.N.**  
Influence of industrial wastes on vegetation of northern forest ecosystems [1987, p.143-147, rus] 41-4570
- Eichenberger, M.**  
R/V *Polar Duke*—a new vessel for antarctic research support [1985, p.437-440, eng] 41-224
- Eidsvik, K.J.**  
Predicted hazard area for a polar low [1986, p.273-277, eng] 41-1810
- Eisenhauer, H.R.**  
Arctic water pollution research: applications of science and technology [1986, 193p., eng] 41-339
- Elsner, H.**  
Evaluation of strain rate measurements on a 20 m deep firn pit, applying a Newtonian model (Kesselwandförmiger, Ötztal Alps, 1967-1978) [1984, p.169-176, eng] 41-633  
Measurements of deformation in a firn pit [1985, p.211-222, ger] 41-717  
Proposal of a constitutive equation of temperate firn [1986, p.1-9, eng] 41-1299  
Rheological properties of temperate firn [1985, p.71-77, eng] 41-4130
- Ekholm, S.**  
Experiences from bulk transports in the Arctic [1986, p.726-733, eng] 41-2054  
Operation of ships in the Arctic [1986, p.553-562, eng] 41-1618
- El Halim, A.O.**  
Results of laboratory tests on AMIR compacted asphalt slabs [1987, p.417-451, eng] 41-4031
- El-Tahan, H.**  
Documentation of iceberg groundings [1986, p.194-199, eng] 41-3110  
Response of offshore structures to bergy-bit and iceberg impacts [1985, p.951-961, eng] 41-671
- El-Tahan, M.**  
Documentation of iceberg groundings [1986, p.194-199, eng] 41-3110
- Prediction of short-term ice edge drift [1987, p.393-400, eng] 41-2448
- Elagin, I.N.**  
Productivity of forest phytocenoses [1984, 149p., rus] 41-1078  
Remote sensing techniques in studying seasonal dynamics of landscapes [1986, p.159-169, rus] 41-3972
- Elenbogen, G.N.**  
Improving the technology of building long crossings of overhead lines across water bodies [1987, p.2-9, rus] 41-3611
- Eley, F.J.**  
Ice monitoring and forecasting for the BeauDril *Kulluk* [1986, p.598-614, eng] 41-169
- Elfgren, L.**  
Field investigation of load-curvature characteristics of reinforced ice [1986, p.175-196, eng] 41-1095
- Elgin, B.B.**  
Calculating foundation stability for tangential forces of frost heave [1985, p.52-53, rus] 41-301  
Measures taken for safe operation of buildings erected on frost-heaving ground in the Chita region [1985, p.25-26, rus] 41-286
- Elias, V.**  
Use of a reinforced earth slab to reduce embankment loads at Auke Bay, Alaska [1981, 21p., eng] 41-4067
- Ellason, E.M.**  
Landsat multispectral images of Antarctica applied to mapping and glaciology [1985, p.256-259, eng] 41-3327
- Ellices, M.**  
Behavior at cryogenic temperatures of steel for concrete reinforcement [1986, p.405-411, eng] 41-2071  
Thermal deformation of loaded concrete at low temperature. 2. Transverse deformation [1986, p.741-748, eng] 41-1999  
Thermal deformation of loaded concrete at low temperature. 3. Lightweight concrete [1986, p.845-852, eng] 41-2001  
Thermal deformation of loaded concrete during thermal cycles from 20 C to -165 C [1984, p.639-644, eng] 41-2003
- Ellerman, P.J.**  
Re-interpretation of glaciovolcanic interaction at Mount Takah and Mount Murphy, Marie Byrd Land, Antarctica [1985, p.57-59, eng] 41-2624
- Ellingwood, B.**  
Probabilistic models for ground snow accumulation [1984, p.49-58, eng] 41-1946  
Serviceability limit states: deflection [1986, p.67-84, eng] 41-2532  
Structural load estimates from geographically sparse data [1987, p.628-632, eng] 41-3406
- Elliott, C.M.**  
Implementing direct filtration and natural freezing of alum sludge [1986, p.52-56, eng] 41-3779
- Elliott, L.R.**  
Degradation of surface ship operations in arctic/cold weather environments [1986, p.223-237, eng] 41-935
- Ellis, J.M.**  
Direct measurement of lichen growth in the central Brooks Range, Alaska, U.S.A., and its application to lichenometric dating [1986, p.289-296, eng] 41-1177
- Ellis, J.**  
Ergonomic evaluation of STAR-VUE and NAV-ICE [1986, 130p. + appends., eng] 41-3365
- El'mesov, M.S.**  
Concentration, ice-forming and condensational properties of giant aerosol particles in the atmosphere [1986, p.238-248, rus] 41-3673
- Elmstrom, K.M.**  
Latest Miocene benthic delta O-18 changes, global ice volume, sea level and the 'Messinian salinity crisis' [1986, p.411-414, eng] 41-1174
- Elskin, V.K.**  
Possibility of using roof-supports made of frozen ice-shingle-gravel mixtures in northern placer mines [1986, p.201-208, rus] 41-2179
- Ely, D.N.**  
Pneumatic deicer and deicing method [1983, 6 col. + figs., eng] 41-2498
- Emel'yanov, V.E.**  
Calculational method for determination of carburetor icing rate [1985, p.544-546, eng] 41-2944
- Emerich, C.**  
Model for an icy halo in comets [1985, p.429-442, eng] 41-1717
- Emery, J.A.**  
Concrete pavers for aircraft pavement surfaces [1986, p.609-623, eng] 41-1546
- Emery, W.J.**  
Automated extraction of pack ice motion from advanced very high resolution radiometer imagery [1986, p.10.725-10.734, eng] 41-1012
- Emory-Moore, M.**  
Textural and mineralogical characteristics of nearshore sediments, eastern Baffin Island [1986, 55p., eng] 41-245
- Emoto, Y.**  
Freezing and thawing resistance of concrete containing chloride [1987, p.901-917, eng] 41-3712

- Strength and freezing-and-thawing resistance of concrete incorporating condensed silica fume [1986, p.1095-1117, eng] 41-1156
- Endo, S.  
Effect of microstructure on HAZ toughness of steel for offshore structures [1987, p.B-16, eng] 41-3942
- Endo, Y.  
Report of pit-wall observations of snow cover in Sapporo [1986, p.1-10, jpn] 41-3501
- Endoh, T.  
Comparison between Landsat cloud images and precipitation radar echoes [1986, p.121-131, jpn] 41-3885  
Three dimensionally scanning Doppler radar [1986, p.133-137, jpn] 41-3886
- Engelen, G.B.  
Hydrological characteristics of an Alpine glacial valley in the North Italian Dolomites [1986, p.275-299, eng] 41-2698
- Engelhardt, H.  
Borehole evidence for a thick layer of basal ice in the central Ronne Ice Shelf [1987, p.318-319, eng] 41-3640  
Waves of accelerated motion in a glacier approaching surge: the mini-surges of Variegated Glacier, Alaska, U.S.A. [1987, p.27-46, eng] 41-3593
- Engelakjón, T.  
General outline of the botanical investigations on Bouvetøya [1986, p.5-9, eng] 41-916  
Phytogeographical relations of the cryptogamic flora of Bouvetøya [1986, p.71-79, eng] 41-923
- Engineering for man-made islands  
Engineering for man-made islands [1986, p.155-158, eng] 41-4486
- Engineering Mechanics Specialty Conference, 6th, Buffalo, NY, May 20-22, 1987  
Engineering mechanics—6th conference. Abstracts [1987, 336p., eng] 41-3352
- Engines and installations for arctic supply vessels  
Engines and installations for arctic supply vessels [1983, p.62-63, eng] 41-789
- England, J.  
Glaciation and the evolution of the Canadian high arctic landscape [1987, p.419-424, eng] 41-3319
- Englberger, W.  
Onset of natural convection and heat transfer in a layer of water below melting ice [1986, p.1799-1804, eng] 41-3298
- English, M.  
Frozen drop embryos in Alberta hailstorms and their origins [1984, p.253-255, eng] 41-4394  
Hailstone concentration and size at the ground and at the melting level [1982, p.423-426, eng] 41-48  
Precipitation initiation through cloud seeding [1984, p.707-710, eng] 41-4412
- English, M.C.  
Preliminary assessment of the chemical and hydrological interaction of acidic snowmelt water with the terrestrial portion of a Canadian shield catchment [1986, p.27-34, eng] 41-2616
- Englund, J.-O.  
Spring characteristics and hydrological models of catchments. A case study from Åstådalen, S.E. Norway [1986, p.1-20, eng] 41-4512
- Engman, E.T.  
Expert system for snowmelt runoff modeling and forecasting [1986, p.174-180, eng] 41-249
- Enokido, M.  
Microbiological investigation of the human pollution at Syowa Station in Antarctica. Special reference to the specimen collected by the 23rd Japanese Antarctic Research Expedition. Pt.2 [1985, p.541-546, jpn] 41-3568
- Enomoto, H.  
Glacier variations and their causes in the northern Patagonia icefield, Chile, since 1944 [1986, p.307-316, eng] 41-1178
- Enomoto, M.  
New development in Japan's pavement management process [1987, p.917-948, eng] 41-4048
- Eating, I.G.  
Effective age of bubbles in polar ice [1985, p.777-790, eng] 41-2111  
Incompatibility of ice-core CO2 data with reconstructions of biotic CO2 sources [1987, p.318-325, eng] 41-4207  
Lattice models of aspects of firm closure: I. Percolation on the interstices of the BCC lattice [1986, p.2841-2854, eng] 41-2576  
On the application of lattice statistics to bubble trapping in ice [1987, p.100-113, eng] 41-3195
- Eaton, V.M.  
Cooling of a salt solution [1987, p.1344-1347, eng] 41-4164  
Formation of a two-phase zone during the crystallization of a mixture in a porous medium [1986, p.447-449, eng] 41-3628
- Environmental assessment of the Alaskan continental shelf, Vol.3: effects and contaminant baselines  
Environmental assessment of the Alaskan continental shelf, Vol.3: effects and contaminant baselines [1980, 352p., eng] 41-3380
- Eom, H.J.  
Scattering from a layered medium connected with rough interfaces: matrix doubling method [1986, p.937-939, eng] 41-2301
- Eorola, M.  
Road technology in cold regions of North America [1984, p.402-406, fin] 41-1938
- Epifani, F.  
Mapping the distribution of buried glacier ice—an example from Lago Delle Locce, Monte Rosa, Italian Alps [1986, p.78-81, eng] 41-743
- Epifanov, A.P.  
Performance of the Zeya hydroelectric power plant dam during its initial period [1986, p.18-21, rus] 41-1919  
Thermal regime and the stress-strain state of a concrete dam, built of rolled concrete, under severe climatic conditions [1987, p.35-37, rus] 41-3268
- Epifanov, V.P.  
Breaking of ice during impact interactions [1985, p.799-801, eng] 41-3629  
Some experimental findings regarding the mechanical properties of sheet ice [1985, p.178-187, eng] 41-2971
- Eppler, D.T.  
Classification of sea ice types with single-band (33.6 GHz) airborne passive microwave imagery [1986, p.10,661-10,695, eng] 41-1008  
NORDA Arctic data collection, processing, and interpretation capabilities [1985, 21p., eng] 41-243  
Scientific challenges at the poles [1987, p.23-26, eng] 41-3408  
Use of ice thickness data derived from aerial photographs to predict the occurrence of thin ice features [1986, p.207-223, eng] 41-2660
- Eranti, E.  
Cold region structural engineering [1986, 529p., eng] 41-338
- Erasov, N.V.  
Calculation and prediction of the regime and distribution of mountain glaciers [1985, 159p., rus] 41-518
- Eremín, G.M.  
Selection of technological elements for frozen ore excavation using combined transportation technique and ore-chutes [1987, p.41-44, rus] 41-4559
- Eremín, N.I.A.  
Using byproducts of iron ore concentration in construction materials produced for the North [1986, 176p., rus] 41-2214
- Eremín, V.V.  
Physico-statistical method of long-range forecasting of ice phenomena on rivers [1986, p.71-81, rus] 41-1966
- Ergeşev, A.  
Ground water runoff into Kirghiz rivers [1984, p.26-35, rus] 41-724  
Water balance of the Changet and Zhazy (Yassy) river basins [1984, p.9-25, rus] 41-723
- Erickson, M.  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. [1986, 138p., eng] 41-2549
- Erikoinen, O.  
Field measurements of the adhesion strength of ice [1986, p.725-734, eng] 41-1128
- Erkkila, J.  
Studies of the mechanical properties of cross-country skis [1986, 24p., eng] 41-3802
- Ermakov, K.K.  
Adfreezing of the materials of skis' sliding surfaces to snow and ice [1984, p.10-12, rus] 41-4506  
Coefficient of friction of the materials of sliding surfaces of skis during movement in snow [1984, p.12-15, rus] 41-4507
- Ermakov, V.I.  
Mechanisms of birch adaptation to conditions of the North [1986, 144p., rus] 41-2751
- Erman, D.C.  
Persistence in the size distribution of surficial bed material during an extreme snowmelt flood [1986, p.191-197, eng] 41-211
- Ermolin, E.D.  
Geologic indication of ground ice in Tien Shan and Pamir [1986, p.22-29, rus] 41-3483
- Ermolov, A.A.  
Results of studying mass balance of Golubin Glacier in 1972-1981 [1986, p.98-102, rus] 41-780
- Ermoshin, V.M.  
Ultrasonic tests of grouting quality in concrete dams [1986, p.33-36, rus] 41-1922
- Ernst, D.D.  
Calcium magnesium acetate research in Washington State [1985, p.8-12, eng] 41-655
- Ershov, E.D.  
Discussion on topics of engineering-geological investigations of permafrost [1987, p.120, rus] 41-4623  
Experimental studies of injected ice formation in fine-grained rocks [1986, p.136-149, rus] 41-2094  
Formation of cryogenic structure in freezing and thawing rocks in active layers of the Yamal Peninsula [1986, p.149-162, rus] 41-2095  
Freezing of water and melting of ice in disperse rocks [1986, p.55-67, eng] 41-3016
- Geocryological research [1986, 224p., rus] 41-2080  
Phase transformations of bound water and ice in soil systems at subzero temperatures [1986, p.8-18, rus] 41-2081  
Physics, chemistry and mechanics of frozen rocks [1986, 333p., rus] 41-3249  
Publication of the monograph *Geocryology of the USSR and the geocryological map of the USSR*, scale 1:2 500 000 [1986, p.212-217, rus] 41-2103  
Structure and scientific trends in cryopedology [1985, p.46-55, eng] 41-2969  
Water freezing and ice melting in fine-grained rocks [1986, p.53-66, rus] 41-2540
- Erukov, G.V.  
Hydrothermal regime of soils in pine forests of Karelia [1986, 112p., rus] 41-2902  
Types of landscapes in the Karelian ASSR [1985, p.4-16, rus] 41-190
- Esch, D.C.  
Surface modifications for thawing of permafrost. Interim report [1984, 15p., eng] 41-4074  
Use of rubber-modified asphalt pavements in cold regions [1987, p.541-574, eng] 41-4036
- Escher-Vetter, H.  
Modeling runoff from Vernagtferner glacier, the Oetzal Alps, Austria [1986, p.65-69, 178-182, rus] 41-4342
- Escobar, F.  
Aspects of glacial hydrology in Patagonia [1987, p.141-150, eng] 41-3839  
Hydrological characteristics of Soler Glacier drainage, Patagonia [1987, p.91-96, eng] 41-3832
- Estkov, A.D.  
Establishing the origin of ground ice according to the content of heavy oxygen isotopes and deuterium [1985, p.66-68, rus] 41-3536  
Oxygen isotope composition of syngenetic ice wedges (analytical data, problems of paleoclimatic reconstruction) [1986, p.107-119, rus] 41-3775  
Prospects for using oxygen isotope determinations in paleogeocryological reconstructions [1985, p.64-65, rus] 41-3535
- Eskola, H.  
Modelling the propulsion machinery behaviour during model propulsion tests in ice [1986, p.1001-1020, eng] 41-1143
- Espizua, L.E.  
Fluctuations of the Río del Plomo glaciers [1986, p.317-327, eng] 41-3563
- Etkin, V.S.  
Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band [1986, p.29-42, eng] 41-2207
- Ettema, R.  
Experiments on freeze-bonding between ice blocks in floating ice rubble [1986, p.397-403, eng] 41-4295  
Ice-engineering: research after the rush [1987, p.(A)22-(A)33, eng] 41-3353  
Model tests on ice-rubble size and ship resistance in ice rubble [1986, p.229-243, eng] 41-1291  
Naled ice growth [1986, 187p., eng] 41-80  
Research needs for physical modelling in ice engineering: reflections from a university ice tank [1986, p.57-65, eng] 41-1304  
Theory and laboratory observations of naled ice growth [1986, p.168-177, eng] 41-676
- Etter, H.-J.  
Accidents and damage due to avalanches in the Swiss Alps [1986, p.107-161, ger] 41-2293
- Evance, T.B.  
Drilling mud usage and discharge in arctic marine waters north of 60 deg for the period 1978-1982 [1985, 6p. + appends, eng] 41-596
- Evans, D.J.A.  
Evidence of a periodic ice-cliff avalanche on north-west Ellesmere Island, N.W.T., Canadian high Arctic [1987, p.68-71, eng] 41-3598  
Five-year growth of rock lichens in a low-Arctic mountain environment, northern Labrador [1986, p.85-91, eng] 41-2707
- Evans, S.G.  
Rock avalanche from the peak of Mount Meager, British Columbia [1987, p.929-933, eng] 41-4017
- Erdokimenko, M.D.  
Forest fire effect on the productivity of stands [1984, p.56-65, rus] 41-1080
- Everett, K.R.  
Pingos of the Prudhoe Bay region, Alaska [1985, p.321-336, eng] 41-1251
- Everett, R.A., Jr.  
Elastic properties and fracture behavior of graphite/polyimide composites at extreme temperatures [1982, p.73-91, eng] 41-1989
- Everett, R.N.  
Design considerations for a kinetic energy ice penetrating tactical sonobuoy [1986, p.521-547, eng] 41-2675
- Everitt, D.A.  
Observations of seasonal changes in diatoms at inshore localities near Davis Station, East Antarctica [1986, p.3-12, eng] 41-1173



- Evers, K.-U.**  
Model test study of level ice forces on cylindrical multilegged structures [1986, p.251-275, eng] 41-2278
- Erin, M.**  
Physico-chemical characteristics of the runoff from rock glaciers in the southern Alps of France [1984, p.27-40, fre] 41-623
- Erseev, M.**  
Ice Island underfoot [1986, 175p., rus] 41-3250
- Erseeva, N.S.**  
Fallen-tree jams of taiga rivers in the West Siberian plain [1986, p.101-107, rus] 41-813
- Erstigneev, V.M.**  
Provision of hydrological information for rational use of natural resources to the Task Economic Complex of the BAM zone [1986, p.156, rus] 41-3983
- Experimental study of fluid deicing system in the NASA Icing Research Tunnel**  
Experimental study of fluid deicing system in the NASA Icing Research Tunnel [1983, 152p., eng] 41-3379
- Ezrakhovich, L.O.**  
Substations 110 kv with the equipment housed in superblock structures [1986, p.3-6, rus] 41-909
- Fabricius, T.**  
Evaluation of Ontario municipal experiments to reduce the use of road salt [1980, 95p., eng] 41-238
- Fadeev, N.N.**  
Statistical method of separating the background component of snow pollution near industrial sources [1986, p.119-123, rus] 41-653
- Fadeev, V.V.**  
Observation of "anomalous" spectra of Raman scattering at the water-ice phase transition [1986, p.836-839, rus] 41-3686
- Fahey, B.D.**  
Experimental study of the effect of humidity and temperature variations on the granular disintegration of argillaceous carbonate rocks in cold climates [1984, p.291-298, eng] 41-1231
- Weathering pit development in the central Otago Mountains of southern New Zealand [1986, p.337-347, eng] 41-1181
- Falko, L.I.**  
Dynamics of temperature fields during accretion of floating ice [1986, p.39-42, rus] 41-2152
- Fainvelts, V.I.A.**  
Comparative efficiency of coal transportation by railroad and by hydraulic pipelines [1986, p.22-24, rus] 41-2783
- Fairall, C.W.**  
Mesoscale variations in surface stress, heat fluxes, and drag coefficient in the marginal ice zone during the 1983 Marginal Ice Zone Experiment [1987, p.6921-6932, eng] 41-4248
- Fairley, H.G.**  
Frost heave compliance testing in Scotland [1981, p.57-62, eng] 41-2927
- Faison, T.K.**  
Thermal resistance measurements of a well-insulated wall using a calibrated hot box [1986, p.957-973, eng] 41-1389
- Fait, P.**  
Snow-halting nets on Mt. Bondone [1986, p.56-61, ita] 41-2238
- Faivusovich, L.L.**  
Standard pile-driving assembly [1986, p.10-11, rus] 41-1525
- Falei, M.I.**  
Cryostat with 3He-vapor evacuation [1987, p.979-981, eng] 41-3159
- Falqueyret, A.**  
Atmospheric icing load measurements on a cable using the end tension [1987, p.131-141, eng] 41-4490
- Falk, M.**  
On the satellite bands accompanying the OH and OD stretching fundamentals of isotopically dilute HDO in ice Ih [1987, p.28-30, eng] 41-4054
- Falkingham, J.C.**  
Iceberg information service of environment Canada [1986, p.557-560, eng] 41-166
- Fanale, F.P.**  
Mars: long term changes in the state and distribution of H<sub>2</sub>O [1985, p.535-564, eng] 41-1723
- Sulfur dioxide ice on Io [1985, p.805-815, eng] 41-1739
- Fancy, S.G.**  
Some aspects of the environmental effects of air cushion vehicle operations in the Arctic [1982, 27p., eng] 41-4068
- Fang, Z.**  
Interaction between subpolar high and polar ice in Northern Hemisphere [1987, p.330-335, eng] 41-4487
- Fangel, H.**  
Use of ice-isles for protection of petroleum production platforms [1986, p.583-604, eng] 41-1119
- Fanshteln, E.A.**  
Hard coatings for diminishing frost heaving and foundation deterioration [1985, p.49-51, rus] 41-300
- Farhadieh, R.**  
Or: free convection melting of a solid immersed in a hot dissimilar fluid [1986, p.1087-1093, eng] 41-393
- Farinella, P.**  
Shapes and strengths of small icy satellites [1985, p.699-710, eng] 41-1732
- Farley, R.D.**  
Numerical modeling of hailstorms and hailstone growth. Part 1: Preliminary model verification and sensitivity tests [1986, p.2014-2035, eng] 41-4059
- Role of low density riming growth in hail production [1984, p.489-492, eng] 41-4404
- Seeding potential of stratus and nimbostratus clouds: a PEP numerical experiment [1982, p.222-225, eng] 41-21
- Farmer, L.D.**  
Classification of sea ice types with single-band (33.6 GHz) airborne passive microwave imagery [1986, p.10.661-10.695, eng] 41-1008
- Use of ice thickness data derived from aerial photographs to predict the occurrence of thin ice features [1986, p.207-223, eng] 41-2660
- Farouki, O.T.**  
Thermal properties of soils [1986, 136p., eng] 41-2973
- Farr, R.W.**  
Portable hot water ice drill [1986, p.549-564, eng] 41-2676
- Farrell, D.**  
Winter field fortifications [1986, 50p., eng] 41-3817
- Farzaneh, M.**  
On the role of water film in the mechanism of flashover of ice insulators [1986, p.281-284, eng] 41-3416
- Fastook, J.L.**  
Finite-element method applied to a time-dependent flowband model [1987, p.203-221, eng] 41-3282
- Faulkner, T.**  
Rapid one-cycle test for evaluating aggregate performance when exposed to freezing and thawing in concrete [1987, p.705-722, eng] 41-3702
- Faure, G.**  
Geology and origin of the Elephant Moraine on the east antarctic ice sheet [1985, p.11-12, eng] 41-2623
- Fazio, P.**  
Simplified procedure to estimate the dynamic thermal performance of existing walls [1986, p.255-271, eng] 41-1380
- Fazzi, A.**  
Spectral analysis for the thermomechanical response of solids to low-frequency dynamic loads [1987, p.26-32, eng] 41-2066
- Feder, H.M.**  
Effect of Prudhoe Bay crude oil on a tidal-flat ecosystem in Port Valdez, Alaska [1978, p.97-104, eng] 41-2121
- Fedor, L.S.**  
Observation of sea ice using the 36-GHz surface contour radar [1987, p.393-402, eng] 41-4174
- Fedorov, A.N.**  
Methods of evaluating and mapping the susceptibility of cryogenic landscapes [1986, p.121-133, rus] 41-3493
- Fedorov, B.S.**  
Construction of structures and foundations by the grout curtain method [1986, 216p., rus] 41-2886
- Fedorov, V.A.**  
Improving thermotechnical properties of lightweight concretes for external wall panels [1987, p.36-37, rus] 41-2794
- Requirements for thermotechnical properties of lightweight concretes for one-layer enclosures for the North [1986, p.42-53, rus] 41-2919
- Thermal and technical properties of light concretes of one-layer enclosures designed for the North [1986, p.36-37, rus] 41-1889
- Fedorov, V.I.**  
Building shallow foundations in the Chita region [1985, p.15-16, rus] 41-280
- Frost heave as an indication of water regime in built-up areas [1985, p.65-70, rus] 41-308
- Thermal and moisture regimes of clay soils in aeration zones of construction sites in the Far East and the prevention of flooding [1985, p.93-104, rus] 41-1364
- Fedorova, N.I.A.**  
Building shallow foundations in the Chita region [1985, p.15-16, rus] 41-280
- Fedorovich, D.I.**  
More precise definition of computed permafrost temperatures in beds of buildings and structures [1986, p.188-192, eng] 41-2945
- Toward improvement of the scientific-technical level of foundation construction on permafrost soils [1987, p.144-146, eng] 41-3214
- Fedorovskii, V.G.**  
Calculating pile foundations for hydraulic structures [1986, 133p., rus] 41-1747
- Fedoseev, I.U.G.**  
Determination of the deformation characteristics of permafrost by the method of probe thawing [1987, p.248-251, eng] 41-4166
- Interaction of thermopiles with artificially frozen bases [1983, p.82-88, rus] 41-4478
- Fedosev, N.F.**  
Moisture redistribution in the snow cover of Central Yakutia [1986, p.104-107, rus] 41-115
- Fedoseeva, V.I.**  
Moisture redistribution in the snow cover of Central Yakutia [1986, p.104-107, rus] 41-115
- Physico-chemical properties of the liquid layer between ice and adfrozen material [1984, p.19-24, rus] 41-4510
- Fedorov, A.P.**  
On the least resistance line of curvilinear blow-out charges detonated in permafrost [1986, p.61-66, rus] 41-2906
- Fedorov, G.A.**  
Automated highway design [1986, 317p., rus] 41-2861
- Feeney, R.E.**  
Antifreeze glycoproteins from polar fish blood [1986, p.59-78, eng] 41-3165
- Feger, K.H.**  
Factors affecting snowmelt streamwater chemistry in the Black Forest (West Germany) [1986, p.257-265, eng] 41-2621
- Feigin, I.U.M.**  
Protected territories of the North [1986, p.18-24, rus] 41-3862
- Felt, D.M.**  
Compendium of marine meteorological and oceanographic products of the Ocean Products Center [1986, 105p., eng] 41-4156
- Feldman, G.M.**  
Practical suggestions for calculating soil temperature regime (current awareness material) [1985, 69p., rus] 41-4611
- Feldman, M.L.**  
Designing electrical groundings for overhead lines and substations in permafrost areas [1986, p.11-12, rus] 41-913
- Feldman, P.D.**  
S2: a clue to the origin of cometary ice? [1985, p.463-471, eng] 41-1719
- Feldman, R.F.**  
Cement science [1984, p.1-53, eng] 41-1031
- Influence of condensed silica fume and sand/cement ratio on pore structure and frost resistance of portland cement mortars [1986, p.973-989, eng] 41-1154
- Feldman, U.**  
Method to estimate open pack-ice thickness from two-day sequences of side-lapping satellite images [1987, p.69-71, eng] 41-4437
- Fellers, G.**  
Concentration and flux of wind-blown snow [1986, 16p., eng] 41-3928
- Fenco Consultants, I.t.d.**  
Pack ice/rubble field interaction study, Issungnak 1980 [1981, 88p. + appends., eng] 41-3550
- Feng, D.**  
Comparison of the trace constituent composition of unrimed and rimed snow crystals [1982, p.61-62, eng] 41-4
- Correlation of snow crystal habit, number flux and snowfall intensity from ground observations [1982, p.485-486, eng] 41-63
- Feoktistova, L.V.**  
Heat and mass transfer during crystal growth from water solutions [1986, p.54-55, rus] 41-2382
- Ferguson, H.M.**  
Antarctica: measuring glacier velocity from satellite images [1986, p.1105-1108, eng] 41-962
- Sedimentary deposits in the northern lowland plains, Mars [1986, p.E166-E174, eng] 41-3749
- Ferguson, R.**  
Movement on the ice front [1986, p.294-299, eng] 41-1512
- Ferguson, R.I.**  
Interrelationships of channel processes, changes and sediments in a proglacial braided river [1986, p.361-371, eng] 41-3566
- Ferner, S.J.**  
Use of snow-pillow data for melt rate input to the streamflow synthesis and reservoir regulation watershed model [1987, p.118-126, eng] 41-2980
- Fernet, M.**  
Environmental constraints for overhead lines: hoar and glazed frost, snow accretion [1986, p.2-8, fre] 41-1559
- Ferrara, A.A.**  
Applying heat pipes to avoid the preferential freezing of highway bridge decks [1977, 5p., eng] 41-4604
- Ferrell, J.K.**  
Heat transfer, 1986: proceedings [1986, 6 vols. + 1 vol. of abstracts, eng] 41-3288
- Ferrick, M.G.**  
Hudson River ice management [1985, p.96-110, eng] 41-1488
- River wave response to the friction-inertia balance [1987, p.764-769, eng] 41-4222
- Ferrigno, J.G.**  
Recession of Grasshopper Glacier, Montana since 1898 [1986, p.65-68, eng] 41-740
- Substantial changes in the coastline of Antarctica revealed by satellite imagery [1987, p.577-583, eng] 41-3856
- Fetcher, N.**  
Growth and flowering in *Eriophorum vaginatum*, annual and latitudinal variation [1986, p.1524-1535, eng] 41-2480

- Fevralev, A.V.**  
Ice dams for protecting water areas of northern ports [1987, p.78-80, rus] 41-3652
- Fey, Y.C.**  
Analytical study of the effect of convection heat transfer on the sublimation of a frozen semi-infinite porous medium [1987, p.771-779, eng] 41-3943
- Fidjestøl, P.**  
Reinforcement corrosion and the use of CSF-based additives [1987, p.1445-1458, eng] 41-3731
- Fielder, D.E.**  
Quill Creek test facility [1986, p.86-115, eng] 41-2517
- Figg, J.**  
Concrete durability: the interface between research and practice [1987, p.255-264, eng] 41-3695
- Filippov, V.D.**  
Calculating tangential frost-heaving forces of ground [1985, p.93-95, rus] 41-321  
Studying the possibility of estimating the frost heave of clayey grounds according to their swelling [1985, p.76-78, rus] 41-312
- Filippov, V.V.**  
Reliability and durability of metal structures of industrial buildings in the Yakut ASSR [1985, p.37-47, rus] 41-2849
- Filippova, P.V.**  
Comparative efficiency of coal transportation by railroad and by hydraulic pipelines [1986, p.22-24, rus] 41-2783
- Filonidov, A.M.**  
Statistical nature of concrete frost resistance indices [1986, p.65-66, rus] 41-884
- Fily, M.**  
Extracting sea ice data from satellite SAR imagery [1986, p.849-854, eng] 41-2299
- Finaev, A.F.**  
Radiation balance of Pamir slopes [1986, p.174-180, rus] 41-130
- Finas, M.F.**  
Behaviour and fate of arctic oil spills [1986, p.13-23, eng] 41-341
- Finkel, R.C.**  
Changes in precipitation chemistry at Dye-3, Greenland [1986, p.9849-9855, eng] 41-1021
- Finklin, A.I.**  
Climatic handbook for Glacier National Park—with data for Waterton Lakes National Park [1986, 124p., eng] 41-2183
- Finnecasa, O.**  
Ice transport through the Fram Strait [1986, 39p., eng] 41-1574
- Finnegan, U.G.**  
Kinetics of ice crystal formation in "dynamic" cloud conditions [1984, p.189-190, eng] 41-4389
- Finnegan, W.G.**  
Study of ice crystal formation in a stably stratified orographic cloud [1982, p.488-490, eng] 41-64
- Finney, G.**  
Drilling offshore western Greenland—ice [1978, p.119-128, eng] 41-2122
- Finney, J.L.**  
Repulsive regularities of water structure in ices and crystalline hydrates [1986, p.717-720, eng] 41-617
- Finnlines fleet for year-round transportation**  
Finnlines fleet for year-round transportation [1986, p.45-47, eng] 41-91
- Fireman, E.L.**  
Uranium-series dating of Allan Hills ice [1985, p.70-71, eng] 41-2630
- Firsov, M.I.**  
Mapping of territories with unstable snow covers [1986, p.82-84, rus] 41-1687  
Results of studying mass balance of Golubin Glacier in 1972-1981 [1986, p.98-102, rus] 41-780
- Firsov, N.G.**  
Regionalization of the territory of the Western Siberian Plate according to the distribution and average annual temperatures of perennially frozen and thawed ground [1985, p.66-72, rus] 41-2970  
Southern boundary of permafrost distribution within the West Siberian Plain [1986, p.106-113, rus] 41-3776
- Firsova, V.P.**  
Soil cover of the Bilimbaev model forest [1986, p.45-72, rus] 41-2875
- Fisher, D.A.**  
Flow near an ice divide: analysis problems and data requirements [1986, p.171-174, eng] 41-763  
Objective reconstructions of the late Wisconsinan Laurentide ice sheet and the significance of deformable beds [1985, p.229-238, eng] 41-2760  
On the special rheological properties of ancient microparticle-laden Northern Hemisphere ice as derived from bore-hole and core measurements [1986, p.501-510, eng] 41-4305  
Wisconsinan and pre-Wisconsinan ice thicknesses on Ellesmere Island, Canada: inferences from ice cores [1987, p.296-301, eng] 41-4079
- Fisher, K.J.**  
Managing budgets for snow control [1987, p.28-37, eng] 41-3415
- Fisher, T.G.**  
Evidence of a periodic ice-cliff avalanche on north-west Ellesmere Island, N.W.T., Canadian high Arctic [1987, p.68-71, eng] 41-3598
- Flak, D.J.**  
Method of measuring liquid water mass fraction of snow by alcohol solution [1986, p.538-541, eng] 41-4311
- Fissel, D.B.**  
Iceberg severity revisited [1986, p.413-428, eng] 41-157  
Physical approaches to iceberg severity prediction [1986, 104p., eng] 41-274
- Fitch, D.E.**  
Implementing direct filtration and natural freezing of alum sludge [1986, p.52-56, eng] 41-3779
- Fitzharris, B.B.**  
New Zealand glaciers [1986, p.84-89, 206-208, eng] 41-1058
- Fitzpatrick, M.**  
U.S. Coast Guard Arctic Pollution Response Research and Development [1985, p.863-865, eng] 41-1914
- Flaman, A.A.M.**  
Non-isothermal and transient flow of molten polymer in an open rectangular cavity [1986, p.1751-1754, eng] 41-3294
- Flanagan, P.W.**  
Forest ecosystems in the Alaskan taiga—a synthesis of structure and function [1986, 230p., eng] 41-1898
- Flanders, S.N.**  
In-situ assessment of two retrofit insulations [1986, p.32-44, eng] 41-1377  
Megastuctures for mobilization [1986, p.10-11, eng] 41-410
- Flemming, R.J.**  
Procedure for measuring building R-values with thermography and heat flux sensors [1987, 29p., eng] 41-4083
- Flemming, R.J.**  
Correlation of icing relationships with airfoil and rotorcraft icing data [1986, p.737-743, eng] 41-802
- Flohn, H.**  
Climatic belts in the case of a unipolar glaciation [1984, p.609-620, eng] 41-1974
- Floriano, M.A.**  
Structure of high-density amorphous ice by neutron diffraction [1986, p.3062-3064, eng] 41-2240
- Focus on snow and ice control**  
Focus on snow and ice control [1986, p.30-31, eng] 41-2310
- Foerster, C.R.**  
Experimental use of dispersants for spill countermeasures on arctic beaches [1984, p.324-337, eng] 41-895
- Föhn, P.**  
Snow and avalanches in the Davos region [1986, p.29-44, eng] 41-2291
- Fokina, N.M.**  
Determining the economic and ecological effects of forest utilization in the North [1985, p.33-38, rus] 41-207
- Follett, A.B.**  
Application of photogrammetry to the study of volcano-glacier interactions on Mount Wrangell, Alaska [1986, p.813-827, eng] 41-2742
- Fomichev, B.S.**  
Allowing for stream and ice dynamics when calculating ice breakup on concentrated overfalls [1986, p.83-87, rus] 41-2755  
Ice movement velocity at localized water-level drops above spillway outlets [1986, p.71-74, rus] 41-1395
- Fomicheva, L.A.**  
Ice in the Azov Sea [1986, p.3-10, rus] 41-1970
- Fominykh, L.A.**  
Buried soils of northeastern Yakutia: (the Khallerchinskaya tundra) [1986, p.109-120, rus] 41-2354
- Foo, P.M.**  
Natural shoal rubble pile study, Beaufort Sea, March-April 1979 [1986, 36p. + figs., appends., eng] 41-3548
- Foot, M.C.**  
Capacitance bridge for low-temperature, high-resolution dielectric measurements [1987, p.130-132, eng] 41-1866
- Forbes, J.R.**  
CO<sub>2</sub> snow-making process [1983, 10 col., eng] 41-1769
- Forbes, R.B.**  
Preliminary evaluation of alluvial diamond discoveries in placer gravels of Crooked Creek, Circle District, Alaska [1987, 26p., eng] 41-2241
- Ford, A.B.**  
Wright Glacier volcanic plug and dike swarm, southeastern Alaska [1987, p.116-118, eng] 41-3467
- Ford, D.C.**  
Karst groundwater activity and landform genesis in modern permafrost regions of Canada [1984, p.340-350, eng] 41-2118
- Ford, R.W.**  
Winter weather records relating to potential frost failure of brickwork [1987, p.7-8, eng] 41-3801
- Forest, T.W.**  
Ice nucleation activity of antarctic marine microorganisms [1985, p.126-128, eng] 41-2955
- Forni, O.P.**  
Importance of the tectonic motions on Ganymede [1985, p.759-766, eng] 41-1736
- Forsman, B.**  
Brash ice effects on ship operations—a presentation of the SSPA manoeuvring simulation model and other brash ice related projects [1986, p.1021-1038, eng] 41-1144
- Förster, W.G.**  
Improving low temperature startability of M113 vehicles: automatic engine cycling tests [1987, 23p. + appends., eng] 41-3813
- Fortin, G.**  
Canadian Beaufort Sea 1984 repetitive mapping of ice scour [1986, 43p. + appends. + maps, eng] 41-1566
- Foster, J.**  
Measurements of the north polar cap of Mars and the Earth's Northern Hemisphere ice and snow [1986, p.223-235, eng] 41-959
- Foster, J.L.**  
Microwave snow signatures (1.5 mm to 3 cm) over Alaska [1987, p.153-160, eng] 41-4492  
Nimbus-7 SMMR derived global snow cover parameters [1987, p.39-44, eng] 41-4432  
Regional differences in snowpacks in the northern U.S. as seen by the Nimbus-7 SMMR [1984, p.67-74, eng] 41-1948
- Foster, M.L.**  
Ice/frost detection using millimeter wave radiometry. Final report for period 28 May 1980-31 August 1981 [1981, 55p., eng] 41-4155
- Foster, M.P.**  
Sensitivity of hailstone growth to variations in microphysical parameters [1982, p.438-441, eng] 41-52
- Foster, T.**  
Laboratory investigation of the influence of liquid water content on the temperature dependence of secondary ice crystal production during soft hail growth [1982, p.123-126, eng] 41-12
- Foster, T.D.**  
Fine structure, internal waves, and intrusions in the marginal ice zone of the Greenland Sea [1987, p.6903-6910, eng] 41-4246
- Foti, G.**  
Interaction between solar energetic particles and interplanetary grains [1985, p.273-285, eng] 41-1707
- Fotiev, S.M.**  
Map of distribution and discontinuity of permafrost in western Siberia [1986, p.38-52, rus] 41-3485  
Physical geocryology [1986, 177p., rus] 41-2885
- Fournier, B.**  
Condition survey of concrete structures built with potentially alkali-reactive limestone aggregates from the Quebec City area (Quebec, Canada) [1987, p.1343-1364, eng] 41-3730
- Fox, J.F.**  
Plant diversity in relation to plant production and disturbance by voles in Alaskan tundra communities [1985, p.199-204, eng] 41-1230
- Friedrich, K.**  
Topographic Rossby waves over Antarctica [1987, p.110-115, eng] 41-3134
- Francis, C.R.**  
ERS-1 radar altimeter mission [1986, p.287-295, eng] 41-2702
- Francois, R.E.**  
Use of acoustics in localizing under-ice oil spills [1983, 17p., eng] 41-3927
- Frank, T.D.**  
Stratifying alpine tundra for geomorphic studies using digitized aerial imagery [1985, p.179-187, eng] 41-1228
- Frankenstein, G.E.**  
Corps of engineers seek ice solutions [1987, p.5-7, eng] 41-3140
- Franklin, L.J.**  
Drilling rig transportation in the Canadian arctic islands [1986, p.420-451, eng] 41-2038
- Franklin, P.R., Jr.**  
CO<sub>2</sub> snow forming copper line [1983, 4 col., eng] 41-1775
- Franks, F.**  
Metastable water at subzero temperatures [1986, p.243-249, eng] 41-4339
- Fransson, L.**  
Field investigation of load-curvature characteristics of reinforced ice [1986, p.175-196, eng] 41-1995
- Frantsen, V.B.**  
Interaction of polymer admixtures with cements in concretes [1986, p.59-62, rus] 41-2756
- Franzini, A.**  
Properties of ice accreted in a two stage growth [1984, p.283-286, eng] 41-4401  
Properties of ice accreted in two-stage growth [1986, p.1057-1080, eng] 41-1475
- Frash, G.B.**  
Frost penetration effect on blasting parameters of seasonally freezing ground [1986, p.55-59, rus] 41-2142  
Peat excavation by blasting in channel construction [1986, p.54-61, rus] 41-2905
- Fraylick, J.R.**  
Avoiding low temperature brittle failures of flat bottom, oil storage tanks [1986, p.125-130, eng] 41-78

- Frederking, R.**  
Field performance of an ice force panel for *in situ* and structural measurements [1986, p.241-261, eng] 41-1100  
Ice coring and testing, Issungnak 1980—results of NRC's data collection [1981, 5p. + figs., eng] 41-3554  
Recent advances in ice mechanics in Canada [1987, p.15-35, eng] 41-2932
- Frederking, R.M.W.**  
Ice cover deformations at Adams Island, winter 1982-1983 [1986, p.346-354, eng] 41-1160  
Ice stress measurements in a rubble field surrounding a caisson-retained island [1986, p.255-262, eng] 41-1597  
Overview of project to measure ice forces at Adams Island [1986, p.651-663, eng] 41-171
- Fredston, J.A.**  
Snow loads in Alaska [1987, 42p., eng] 41-3423
- Freeman, K.**  
Spray ice: a menace to mariners [1987, p.11-13, 39, eng] 41-3412
- Frel, H.-J.**  
High-precision distance measurement with an unmanned moving target [1986, p.93-95, eng] 41-746
- Frettilin, V.S.**  
Calculating runoff hydrograph for the Marukh mountain-glacier basin, Caucasus [1986, p.69-74, 182-186, rus] 41-4343
- Frettas, A.**  
Model test of an ice class bulk carrier with the Thyssen/Waas bow form [1986, p.168-172, eng] 41-978
- Frekstad, P.A.**  
"Ross Rig" completed [1986, p.58-59, eng] 41-92
- French, D.D.**  
Bacterial populations in soils of a subantarctic island [1986, p.75-82, eng] 41-501
- French, H.M.**  
Focus: permafrost geomorphology [1986, p.358-366, eng] 41-2075  
Natural realm in the Arctic: a critique from a developmental perspective [1987, p.154-163, eng] 41-3237  
Periglacial involutions and mass displacement structures, Banks Island, Canada [1986, p.167-174, eng] 41-1875
- Fresco-Mayoux, A.**  
Soviet research station disappears [1986, p.61-63, fre] 41-2018
- Freysteinson, S.**  
Tungnartjökull profile surveys 1959-1979 [1984, p.131-139, ice] 41-806
- Fridland, V.M.**  
Problems of geography, origin and classification of soils [1986, 24p., rus] 41-2289
- Friedheim, R.L.**  
U.S.-Canada Arctic policy forum: impressions from the American co-chair [1986, p.360-367, eng] 41-2692
- Friedli, H.**  
Ice core record of the C-13/C-12 ratio of atmospheric CO<sub>2</sub> in the past two centuries [1986, p.237-238, eng] 41-1631
- Friedmann, E.I.**  
Cryptoendolithic microbial environment in the Ross desert of Antarctica: satellite-transmitted continuous nanoclimate data, 1984 to 1986 [1987, p.273-287, eng] 41-4627  
Method for the continuous monitoring of snow: application to the cryptoendolithic microbial community of Antarctica [1985, p.179-181, eng] 41-3322
- Frishter, I.U.I.**  
Structures of foundations designed for perennially frozen strongly deformable grounds [1986, p.29-32, rus] 41-2797
- Frishter, V.I.U.**  
Selection of effective admixtures for concrete structures of the Kolyma Hydroelectric Plant [1986, p.45-46, rus] 41-881
- Froehlich, H.A.**  
Freezing technique for sampling skeletal, structureless forest soils [1986, p.1640-1642, eng] 41-2693
- Froeschlé, C.**  
Amorphous-crystalline phase transition and the light curve of comet P/Halley [1985, p.419-428, eng] 41-1716
- Frolor, I.E.**  
Numerical modeling of annual cycle of ice cover evolution and seasonal forecasts of ice redistribution in the Soviet Arctic seas [1986, p.71-77, rus] 41-4198
- Fromm, H.J.**  
Winter maintenance practice and research in Ontario [1978, p.1-4, eng] 41-378
- Frost, M.E.**  
Sea water density variation in the arctic region and submarine operational implications [1986, p.1-30, eng] 41-2653
- Frydenlund, T.E.**  
Challenging concept in road construction: superlight fill materials [1986, p.11-14, eng] 41-2260
- Fryxell, G.A.**  
Phytoplankton from the southwestern Atlantic Ocean [1985, p.143-145, eng] 41-2959  
Quantitative genetic analysis of morphological variation in an antarctic diatom grown at two light intensities [1987, p.42-54, eng] 41-3997
- Fuglestad, T.C.**  
Alaska railroad between Anchorage and Fairbanks: guidebook to permafrost and engineering problems [1986, 82p., eng] 41-1573
- Fujii, Y.**  
Comparison of the surface conditions of the inland ice sheet, Dronning Maud Land, Antarctica, derived from NOAA AVHRR data with ground observation [1987, p.72-75, eng] 41-4438  
Japanese activities on automatic weather observations [1986, p.19-20, eng] 41-1075  
Textures and fabrics of 700-m deep ice core obtained at Mizuho Station, East Antarctica [1986, p.74-77, eng] 41-3660
- Fujita, Y.**  
Comparison between the cracks of landslide debris blocks and glacier cracks [1985, p.49-55, jpn] 41-4590
- Fujiwara, T.**  
Deterioration of concrete used in road bridges due to freezing and thawing [1987, p.805-818, eng] 41-3707
- Fujiwara, S.**  
Short report on the piled-rock type wind hole at Sot'nzan and ice accretion mechanism [1986, p.261-266, eng] 41-2331
- Fujiyoshi, Y.**  
Characteristics of precipitation and vertical structure of air temperature in the northern Patagonia [1987, p.15-23, eng] 41-3823  
Cooling of water and the overlying air by melting ice at Lagoon San Rafael in the northern Patagonia [1987, p.97-102, eng] 41-3833  
On snow particles comprising an aggregate [1984, p.87-90, eng] 41-4376  
Short-term variation of oxygen isotopic composition of falling snow [1986, p.353-363, eng] 41-2502  
Three dimensionally scanning Doppler radar [1986, p.133-137, jpn] 41-3886  
Water depth of Lagoon San Rafael, Patagonia [1987, p.103-105, eng] 41-3834
- Fukami, H.**  
Ablation of ice and heat balance on Soler Glacier, Patagonia [1987, p.37-42, eng] 41-3826  
Hydrological characteristics of Soler Glacier drainage, Patagonia [1987, p.91-96, eng] 41-3832  
Meteorological measurements at Soler Glacier, Patagonia, in 1985 [1987, p.31-36, eng] 41-3825
- Fukuchi, M.**  
Surface chlorophyll a distribution in marginal ice zone in Antarctica, 1984/85 [1986, p.24-33, eng] 41-3630
- Fukuda, K.**  
Countermeasures against damage by heavy snowfall in Kinki Nippon railways [1985, p.19-20, jpn] 41-181
- Fukuda, M.**  
Experimental studies on reducing methods of uplift force to a steel pipe [1986, p.109-120, jpn] 41-3884  
Experimental study on prevention of differential frost heave by using C cogrid [1985, p.179-186, jpn] 41-4586  
*In situ* frost heaving test based on the segregation potential concept [1986, p.99-107, jpn] 41-3883  
Numerical analysis of frost heaving based upon the coupled heat and water flow model [1986, p.83-97, jpn] 41-3882
- Fukuda, T.**  
Factor analyses of damage modes of asphalt pavements [1987, p.511-523, eng] 41-4034
- Fukuda, Y.**  
Processing of sea gravity data using online navigational information of icebreaker *Shirase* [1986, p.13-18, eng] 41-1470  
Surface chlorophyll a distribution in marginal ice zone in Antarctica, 1984/85 [1986, p.24-33, eng] 41-3630
- Fukushi, H.**  
Observation of internal structure in sea ice by X-ray computed tomography [1986, p.59-67, jpn] 41-3880
- Fukushima, Y.**  
Analytical study of powder snow avalanches [1986, p.189-197, jpn] 41-2602  
Fluid dynamical analysis of powder snow avalanches at Maseguchi in Niigata [1987, p.1-8, jpn] 41-3753  
Hydrological data of Langtang Valley, Nepal Himalayas [1987, p.115-120, eng] 41-3923  
Runoff characteristics in three glacier-covered watersheds of Langtang Valley, Nepal Himalayas [1987, p.11-18, eng] 41-3909
- Fukuta, N.**  
Determination of ice crystal growth parameters in a new supercooled cloud tunnel [1982, p.325-328, eng] 41-25  
Experimental and theoretical studies of ice crystal habit development [1982, p.329-332, eng] 41-26  
Mechanism of habit development in diffusional ice crystal growth [1984, p.159-162, eng] 41-4381  
Microphysical origin of graupel and hail [1984, p.257-260, eng] 41-4395  
New horizontal gradient, continuous flow, ice thermal diffusion chamber [1985, p.448-467, eng] 41-3216  
Studies of growth rates of ice crystal at different temperature and ice supersaturation [1984, p.183-186, eng] 41-4388
- Fukuzawa, T.**  
Ice core drilling operations in the Northern Patagonia Icefield [1987, p.151-155, eng] 41-3840
- Full, W.E.**  
Use of ice thickness data derived from aerial photographs to predict the occurrence of thin ice features [1986, p.207-223, eng] 41-2660
- Fulton, R.J.**  
Inception, growth and decay of the Laurentide Ice Sheet [1987, p.13-15, eng] 41-4096
- Funder, S.**  
Chronology of the last interglacial/glacial cycle in Greenland: first approximation [1984, p.261-278, eng] 41-4324
- Funegard, E.G.**  
Design and construction of the Mars ice island [1987, p.25-32, eng] 41-2398  
Laboratory soil testing for design of arctic offshore structures [1986, p.137-149, eng] 41-359
- Fung, A.K.**  
Microwave remote sensing—active and passive [1981, 216p., (3 vols.), eng] 41-1508
- Furiae, V.V.**  
Remote sensing methods of evaluating the state of taiga and its reforestation after forest fires [1986, p.147-159, rus] 41-3971
- Furman, M.Sh.**  
Providing hydrometeorological information for building ice roads and crossings in the Irkutsk Region and the Buryat ASSR [1986, p.217-221, rus] 41-2182
- Fursov, V.V.**  
Construction of low-rise buildings on seasonally freezing gravelly grounds [1985, p.30-32, rus] 41-289  
Interaction of shallow foundations with underlying seasonally freezing layers [1985, p.57-59, rus] 41-304
- Furusawa, J.**  
Development of tensile strength 50 kgf/mm<sup>2</sup> grade steel plates for arctic offshore structures with high toughness in large heat input welds (Investigation on large heat input weldability of steel plates with 50 kgf/mm<sup>2</sup> grade for arctic offshore structures—3) [1987, p.8-15, eng] 41-3941
- Furusho, H.**  
Heat transfer characteristics of a latent heat storage unit with a finned tube, Pts. 1 and 2 [1986, p.2978-2992, eng] 41-2110
- Fushimi, H.**  
Topographic characteristics in the ablation area of the Khumbu Glacier, Nepal, Himalaya [1986, p.177-180, eng] 41-765
- Gaber, R.E.**  
CO<sub>2</sub> snow-making process [1983, 10 col., eng] 41-1769
- Gabison, R.**  
Thermodynamic model of the formation, growth, and decay of first-year sea ice [1987, p.105-119, eng] 41-3603
- Gachechiladze, G.A.**  
Influence of glacier water on the formation of the chemical composition of mountain river water [1986, p.78-82, eng] 41-1692
- Gadel, F.**  
Humic substances from deposits of a natural laboratory: a blue lake on the ice-cap (Greenland) [1987, p.107-109, eng] 41-4140
- Gadaby, K.J.**  
Convective loop heat losses in buildings [1986, p.751-760, eng] 41-1388
- Gaffi, R.**  
Optimum sand specifications for roadway ice control. Final report [1982, 36p., eng] 41-3047
- Gaffney, E.S.**  
Hugoniot of water ice [1985, p.119-148, eng] 41-1701
- Gift, S.I.A.**  
Substations 110/6-10 kv built in the Urengoy gas field area [1986, p.6-7, rus] 41-910
- Gagarin, V.E.**  
Conditions of upbuilding and properties of artificial sea-water ice [1986, p.140-146, rus] 41-2167  
Structure and mechanical properties of artificial ice [1986, p.169-176, rus] 41-2837  
Using a three-dimensional sea-water freezing technique in building artificial ice structures [1986, p.172-176, rus] 41-2173
- Gagliano, J.A.**  
Ice/frost detection using millimeter wave radiometry. Final report for period 28 May 1980-31 August 1981 [1981, 55p., eng] 41-4155
- Gaidasenko, E.I.**  
Solubility of ice in frozen ground induced by salt solutions [1986, p.32-36, rus] 41-2150
- Gaidina, A.A.**  
Waterproofing and corrosion prevention in hydraulic structures [1985, 100p., rus] 41-431
- Gaitsgori, M.M.**  
Physico-mathematical model of caterpillar tractors equipped with scarifier attachments [1978, p.3-7, ru] 41-1311
- Gaivoronski, V.N.**  
Estimating design values of road freezing depths [1986, p.12-13, rus] 41-510
- Gajewski, S.Z.**  
Geological literature of the Alaska Peninsula to 1985 [1986, 113p., eng] 41-957



- Galakhov, I.N.**  
Basic aspects of the requirements for the brittle fracture strength of ships and marine structures under northern conditions [1986, p.1-22, eng] 41-1579
- Galakhov, V.P.**  
Using snow reserve coefficients in calculating maximum annual snow reserves in the Verkhnyaya Katun' River basin [1986, p.100-105, rus] 41-1967
- Galarabos, T.V.**  
Serviceability limit states: deflection [1986, p.67-84, eng] 41-2532
- Galtmullin, V.A.**  
Using tractor rippers on frozen grounds [1982, p.40-46, rus] 41-3546
- Galkina, N.V.**  
Productivity of natural meadows in the upper Angara River delta [1986, p.78-83, rus] 41-1404
- Gallagher, J.**  
Moraine ridge deposition on Bovergreen glacial foreland [1985, p.61-73, eng] 41-585
- Gallagher, J.G.**  
Relation of millimeter-wavelength backscatter to surface snow properties [1987, p.188-194, eng] 41-3318
- Galloway, J.P.**  
Geologic studies in Alaska by the U.S. Geological Survey during 1986 [1987, 195p., eng] 41-3466
- Gallagher, J.P.**  
Landslides in Alaska: a bibliography of the literature describing landslides and other forms of slope instability [1986, 54p., eng] 41-797
- Galushka, L.S.**  
Studying the effect of ground conditions on strength and stability of no-pilework bridge supports exposed to moving ice [1987, p.101-104, rus] 41-3792
- Gamaliunova, L.V.**  
Regularities governing thermophysical properties of peat in the Tiumen' region [1986, p.46-52, rus] 41-600
- Gamble, R.P.**  
Current ice road and structure design and construction procedures [1986, p.602-648, eng] 41-2048
- Gan, P.A.**  
Hydrologic studies in mountain forests of the U.S.S.R. [1985, 172p., rus] 41-3872
- Ganeles, L.B.**  
Frost heave of ground under variable loading [1985, p.80-82, rus] 41-314  
Laboratory technique of determining frost heave coefficient [1985, p.106-107, rus] 41-328  
Water accumulation and frost heave in seasonally freezing ground [1985, p.82-83, rus] 41-315
- Gao, W.**  
Growth rate of frost formation through sublimation—a porous medium physical model of frost layers [1987, p.584-593, eng] 41-3402
- Gao, X.Q.**  
Ice-core drilling site at Law Dome summit, Wilkes Land, Antarctica [1986, 34p., eng] 41-459
- Gapeev, S.I.**  
Using artificial cooling devices in permafrost areas [1983, p.41-58, rus] 41-4474
- Gapiashko, V.G.**  
Estimating snow reserves, avalanches, runoff and water balance in the Kyzylchi River basin (based on aerial photography) [1986, p.19-23, rus] 41-699
- Gaponenko, G.I.**  
Geophysical exploration methods in the Arctic [1978, 165p., rus] 41-998
- Gargulia, L.S.**  
Compiling maps for evaluating potential thermokarst sagging [1986, p.77-95, rus] 41-2087  
Prognostic geocryological mapping at the regional and the design research stages [1986, p.38-45, rus] 41-2084  
Publication of the monograph *Geocryology of the USSR and the geocryological map of the USSR*, scale 1:2 500 000 [1986, p.212-217, rus] 41-2103
- Garbe, G.H.**  
Anti-icing and de-icing of naval surface ships [1986, p.263-282, eng] 41-937
- Garber, D.P.**  
Elastic properties and fracture behavior of graphite/polyimide composites at extreme temperatures [1982, p.73-91, eng] 41-1989
- Garcia-Garcia, F.**  
Hail to rain conversion through melting [1984, p.275-278, eng] 41-4399
- Garcia, J.A.**  
Study of the fit of various statistical distributions to ice nuclei concentration data [1984, p.135-140, spa] 41-2749
- Gardner, J.S.**  
Evidence for a Neoglaciation advance of the Boundary Glacier, Banff National Park, Alberta [1985, p.1753-1755, eng] 41-1240  
Evidence for headwall weathering zones, Boundary Glacier, Canadian Rocky Mountains [1987, p.60-67, eng] 41-3597  
Recent fluctuations of Rakhiot Glacier, Nanga Parbat, Punjab Himalaya, Pakistan [1986, p.527-529, eng] 41-4308  
Vascular plants of mountain talus slopes, Mt. Rae area, Alberta, Canada [1986, p.218-230, eng] 41-1256
- Gardner, N.J.**  
Temperature distribution and heat transfer during curing processes of large scale concrete structures [1987, p.113-118, eng] 41-2411
- Garfield, D.E.**  
Portable hot water ice drill [1986, p.549-564, eng] 41-2676
- Garifulin, V.M.**  
Winter concreting at the Bol'shoy Almaatinskiy Channel [1985, p.18-19, rus] 41-2552
- Garkun, L.M.**  
Methods of acting on the state of stress of massive concrete hydraulic structures [1987, 111p., rus] 41-4123
- Garrett, R.P.**  
Sea ice thickness distribution in the Arctic Ocean [1987, p.259-280, eng] 41-3037
- Garrett, S.W.**  
Geophysical fieldwork on the Ronne Ice Shelf, Antarctica [1986, p.9-14, eng] 41-1786
- Garrison, D.L.**  
Microheterotrophs in the ice-edge zone: an AMERIEZ study [1985, p.136-137, eng] 41-2958  
Organism losses during ice melting: a serious bias in sea ice community studies [1986, p.237-239, eng] 41-1016  
Wilkes Land Expedition 1985: biological observations in the ice-edge zone [1985, p.123-124, eng] 41-2954
- Gartner, B.L.**  
Factors limiting seasonal growth and peak biomass accumulation in *Eriophorum vaginatum* in Alaskan tussock tundra [1986, p.257-278, eng] 41-2190  
Reproduction of *Eriophorum vaginatum* by seed in Alaskan tussock tundra [1986, p.1-18, eng] 41-2188
- Gartsman, L.B.**  
Probabilities of ice, wind and temperature loads on electrical transmission lines [1987, 200p., rus] 41-3245
- Gas Hydrates, Arctic/Offshore Research, and Deep Source Gas Contractors Review Meeting, Morgantown, WV, Mar. 25-26, 1986**  
Proceedings [1986, 241p., eng] 41-365
- Gascard, J.C.**  
Large-scale oceanography in Fram Strait during the 1984 Marginal Ice Zone Experiment [1987, p.6719-6728, eng] 41-4232
- Gaskill, H.**  
Report on a non-deterministic model of populations of iceberg scour depths [1986, p.249-258, eng] 41-3117
- Gates, E.M.**  
Modelling ice accretion on non-rotating cylinders: the incorporation of time dependence and internal heat conduction [1987, p.177-191, eng] 41-4494
- Gatto, L.**  
Hudson River ice management [1985, p.96-110, eng] 41-1488
- Gatto, L.W.**  
Bank conditions and erosion along selected reservoirs [1987, p.143-154, eng] 41-2495
- Gaudichet, A.**  
Investigation by analytical transmission electron microscopy of individual insoluble microparticles from antarctic (Dome C) ice core samples [1986, p.250-261, eng] 41-1755
- Gauthier, L.**  
Dating ice-wedge growth in subarctic peatlands following deforestation [1986, p.724-727, eng] 41-618
- Gavardashvili, G.V.**  
Results of laboratory investigations of newly designed mud-flow control structures of semi-cylindrical form [1986, p.169-171, rus] 41-1626
- Gavrilenko, A.S.**  
Remote sensing of sea ice by complex radar-radiometric methods [1986, p.130-134, rus] 41-706
- Gavrilenko, V.I.**  
Ways of increasing the service life of hydraulic structures within meliorative systems in frost-heaving ground [1985, p.61-63, rus] 41-306
- Gavril'ev, R.I.**  
Studies of thermophysical properties of soils containing coarse-clastic inclusions [1986, p.60-71, rus] 41-1538
- Gavrilov, V.P.**  
Ice destruction. Methods and technology [1986, 214p., eng] 41-2564
- Gavrilov, A.N.**  
Influence of temperature regime and ice content on deformation of embankments built of coarse-clastic soils [1986, p.44-53, rus] 41-3445
- Gavrilov, A.V.**  
Methods of using aerial- and space-survey data when studying the distribution and temperature of seasonally and perennially frozen rocks [1986, p.58-76, rus] 41-2086  
Regionalization of permafrost zone in the USSR for environmental protection purposes [1986, p.39, rus] 41-3975
- Gayet, J.F.**  
Ice deposit characteristics versus meteorological parameters from mountain top measurements and comparisons with a numerical investigation [1984, p.733-736, eng] 41-4414  
Role of ice crystals on ice accretion processes [1984, p.737-740, eng] 41-4415  
Secondary ice multiplication by "splintering" in low stratocumulus clouds [1984, p.195-198, eng] 41-4391
- Gazeley, M.**  
Freeze protection and temperature maintenance of ships, shipborne equipment and electronic systems [1986, p.500-542, eng] 41-954
- Geballe, T.R.**  
Sulfur dioxide ice on Io [1985, p.805-815, eng] 41-1739
- Gebhart, B.**  
Stability of vertical thermal buoyancy induced flows in cold pure and saline water [1986, p.1383-1392, eng] 41-565
- Gebler, S.**  
Fly ash and concrete durability [1987, p.1043-1069, eng] 41-3718
- Geirnaert, W.**  
Hydrological characteristics of an Alpine glacial valley in the North Italian Dolomites [1986, p.275-299, eng] 41-2698
- Geleta, I.P.**  
Hydrologic aspects of swamp stability [1986, p.49-57, rus] 41-1366
- Gell, W.A.**  
Underground ice in permafrost, Mackenzie Delta-Tuktoyaktuk Peninsula, N.W.T. [1976, 260p., eng] 41-1764
- Gellatly, A.**  
Movement on the ice front [1986, p.294-299, eng] 41-1512
- Gellatly, A.F.**  
Rock glaciers, ice-cored moraines and the problem of "hidden" ice in glacier mapping [1986, p.181-183, eng] 41-766
- Genrikh, G.A.**  
High-voltage network for areas of increased intensity of icing [1976, 38 col. + 22 sheets, eng] 41-2497
- Georgiuss, R.S.**  
Realization of the ice point [1986, p.573-575, eng] 41-3304
- Geotechnical research focuses on permafrost**  
Geotechnical research focuses on permafrost [1986, p.9-10, eng] 41-2976
- Gerard, R.**  
River ice jams: theory, case studies, and applications [1987, p.241-255, eng] 41-2243
- Gerasimov, V.A.**  
Mudflow-hazard areas of northern Caucasus [1985, p.39-46, rus] 41-843
- Geresdi, I.**  
Numerical model of hailstone growth [1984, p.493-496, eng] 41-4405
- Gershanovich, G.L.**  
Concretes with unsorted sand-gravel mixtures (from experience with the Angara hydroelectric power plant cascade) [1986, p.50-53, rus] 41-1924
- Gershenzon, M.E.**  
Cryostat with 3He-vapor evacuation [1987, p.979-981, eng] 41-3159
- Gershunov, E.M.**  
Massive ice-resistant offshore structures: settlement and reliability of soil foundations [1986, p.605-623, eng] 41-1120  
Scale effect in ice [1986, p.277-284, eng] 41-1294  
Structure-ridge interaction [1987, p.85-94, eng] 41-4218  
Structure-rubble field interaction [1987, p.95-103, eng] 41-4219
- Gerwick, B.C., Jr.**  
Artificial islands for arctic offshore exploratory drilling and production islands [1984, p.467-476, eng] 41-894  
Behavior of prestressed lightweight concrete subjected to high-intensity cyclic stress at cryogenic temperatures [1986, p.727-736, eng] 41-1865  
Gravity base of offshore production platform with ice-penetrating peripheral nose sections [1983, 8 col. + figs., eng] 41-1670  
Static and cyclic behavior of structural lightweight concrete at cryogenic temperatures [1985, p.439-445, eng] 41-890
- Getker, M.I.**  
Some properties of the regime of a stable snow cover in the Hindukush Mountains [1986, p.73-78, rus] 41-1641
- Geurts, M.A.**  
Morphology, genesis and temporal context of the Aishihik pingo (Suk Yukon) [1985, p.291-298, fre] 41-2761
- Gevirts, G.I.A.**  
Improving the design of underground hydraulic structures built in permafrost [1986, p.190-197, rus] 41-3462
- Gevorgian, S.G.**  
Development of frost fracture systems in massive frozen ground [1986, p.78-82, rus] 41-2823
- Ghattas, O.N.**  
Fatigue and freeze-thaw resistance of epoxy mortar [1985, p.33-37, eng] 41-647
- Ghoneim, G.A.**  
Rational approach to the development of probabilistic design criteria for Arctic shipping [1987, p.401-406, eng] 41-2449
- Ghoneim, G.A.M.**  
Global ship ice impact forces determined from full-scale tests and analytical modeling of the icebreakers *Canmar Kigoriak* and *Robert LeMeur* [1984, p.253-282, eng] 41-875

- Ghoniem, G.A.M. (cont.)**  
Local and global strength aspects for icebreaking ships [1986, p.105-148, eng] 41-2025
- Giardino, J.R.**  
Statistical interpretation of the fabric of a rock glacier [1985, p.165-177, eng] 41-1227  
Tree-ring analysis of movement of a rock-glacier complex on Mount Mestas, Colorado, U.S.A. [1984, p.299-309, eng] 41-1232
- Giegerich, H.**  
Transportation considerations in Arctic mining development [1986, p.352-367, eng] 41-2035
- Gifford, G.P.**  
Assessment of shear strength loss of a silty sand subjected to frost action [1984, 296p., eng] 41-901
- Gignelshvili, G.N.**  
Tbilisi Glacier (glaciological and hydrometeorological investigations) [1986, 116p., rus] 41-3367
- Gigolan, D.K.**  
Microbiocenoses and biologic activity in forest soils of the Angara-Yenisey region [1985, p.35-47, rus] 41-4110
- Gignère, P.A.**  
Nature of the 'free' OH groups in water [1986, p.341-344, eng] 41-525
- Gilbert, C.**  
Description and interpretation of geologic materials from shotholes drilled for the Trans-Alaska Crustal Transect Project, Copper River basin, Alaska, May 1985 [1986, 18p., eng] 41-4106
- Gilbert, G.R.**  
Ocean-bottom sea-ice scour: a computer-based data management system [1986, p.157-166, eng] 41-3106
- Gilbert, R.M.**  
Cold-induced losses in loose-sheath fiber-optic cables [1981, p.77-79, eng] 41-582
- Gilichinski, D.A.**  
Buried soils of northeastern Yakutia (the Khallerchinskaya tundra) [1986, p.109-120, rus] 41-2354
- Gill, S.J.**  
Heat of solution of methane in water from 0 to 50 C [1986, p.4621-4623, eng] 41-2064  
Heats of solution of ethane and propane in water from 0 to 50 C [1987, p.245-248, eng] 41-3311
- Gillespie, J.W.**  
Environmental exposure of carbon/epoxy composite material systems [1982, p.137-147, eng] 41-1991
- Gillespie, R.T.**  
Regional iceberg scour distribution and variability on the eastern Canadian continental shelf [1986, p.172-181, eng] 41-3108
- Gillet, P.**  
Creep of high-pressure ice VI [1985, p.109-118, eng] 41-1700
- Gillies, T.K.**  
Thunder Bay management program, 1979-1985: overview report [1986, 86p., eng] 41-2184
- Gilmer, G.H.**  
Molecular dynamics investigation of the crystal-fluid interface. 4. Free energies of crystal-vapor systems [1986, p.5741-5748, eng] 41-497  
Molecular dynamics investigation of the crystal-fluid interface. 6. Excess surface free energies of crystal-liquid systems [1986, p.5759-5768, eng] 41-499  
Molecular dynamics of the crystal-fluid interface. 5. Structure and dynamics of crystal-melt systems [1986, p.5749-5758, eng] 41-498
- Gilmore, D.W.**  
Changes in asphalt concrete durability resulting from exposure to multiple cycles of freezing and thawing [1985, p.73-88, eng] 41-3334
- Gimmedstad, G.G.**  
Scattering corrections to extinction coefficients measured in falling snow [1983, p.86-89, eng] 41-2315
- Ginzburg, Ts.G.**  
Concretes with complex admixtures for the Sayano-Shushenskaya dam [1985, p.71-73, rus] 41-419  
Concretes with polyfunctional admixtures [1985, p.13-17, rus] 41-416  
Methods of estimating the efficiency of new surface-active additives [1985, p.3-9, rus] 41-414  
New compound admixture for highly frost-resistant poured concretes [1986, p.15-16, rus] 41-879
- Girdlark, G.V.**  
Ice cover of the North European Basin as an indication of natural climatic cycles [1986, p.122-127, rus] 41-119
- Givier, R.C.**  
Environmental exposure of carbon/epoxy composite material systems [1982, p.137-147, eng] 41-1991
- Gjessing, D.T.**  
Ocean wave phenomena observed with an adaptive multifrequency radar system [1986, p.311-327, eng] 41-1813
- Gjessing, Y.**  
Absolute movements, mass balance and snow temperatures of the Riiser-Larsenisen Ice Shelf, Antarctica [1986, p.23-31, eng] 41-4094
- Gladkov, M.G.**  
Determination of the ice load on elements of marine hydraulic structures [1987, p.417-420, eng] 41-2601
- Gladkov, V.S.**  
Preliminary curing of reinforced concrete bridge structures in heated thermo-forms [1986, p.28-29, rus] 41-1535
- Glass, M.**  
Classification of ambiguous ice particle shadowgraphs by consensus [1985, p.675-679, eng] 41-3218  
Droplet spectra and liquid water content measurements in aircraft icing environments [1982, p.400-403, eng] 41-43  
Observed changes in ice crystal type in thick stratiform clouds [1982, p.201-202, eng] 41-15
- Glass, R.L.**  
Hydrologic conditions Connors Bog area, Anchorage, Alaska [1986, 23p., eng] 41-2196  
Hydrologic conditions in the Klatt Bog area, Anchorage, Alaska [1986, 19p., eng] 41-798
- Glazov, S.F.**  
Architectural and structural type of the 1986-1995 models of refueling-tankers [1984, p.19-29, rus] 41-541
- Glazovskaya, M.A.**  
Progress in pedology. Contributions of Soviet pedologists to the 13th International Congress of Pedologists, Hamburg, 1986 [1986, 270p., rus] 41-1743
- Glazovskii, A.F.**  
Composition and structure of the layered ice deposit "Lediana Gora" at the Yenisey River [1986, p.35-43, rus] 41-103  
Composition and structure of the Ledyanaya Gora tabular ground ice body on the Yenisey [1986, p.273-285, eng] 41-3618  
Glacial erosion in western Antarctica [1986, p.135-139, rus] 41-1655
- Glazyrin, G.E.**  
Calculating basic characteristics of mountain glaciers under climatic changes [1986, p.44-47, 173-175, eng] 41-1053  
Calculating hydrological characteristics of the Mertsbakker Lake outburst [1986, p.36-43, rus] 41-546  
Calculating mean altitude of firm lines for groups of mountain glaciers [1986, p.64-68, rus] 41-1639  
Calculating the volume of a stationary mountain glacier [1986, p.88-98, rus] 41-779  
Changes in glacial runoff of Central Asian rivers in relation to possible climatic variations [1986, p.59-70, rus] 41-776  
Experimental determination of water movement in the firm layers of Abramov Glacier [1986, p.110-117, rus] 41-781
- Glazyrina, E.L.**  
Calculating mean altitude of firm lines for groups of mountain glaciers [1986, p.64-68, rus] 41-1639
- Glebov, F.Z.**  
Influence of paludification and the combustibility of stands on their development and productivity [1984, p.133-141, rus] 41-1083  
Interrelations between forest and swamp in western Siberia [1986, p.145-152, rus] 41-1405
- Glebova, L.N.**  
Alimentation intensity of Late Pleistocene glaciers in the eastern half of the USSR [1986, p.56-64, rus] 41-1638
- Glen, I.F.**  
Manoeuvring tests in ice aboard USCGC *Polar Star* in Antarctica, 1985 [1986, 44p. + appends., eng] 41-3373  
Summary of the results of the Canadian participation in the Polar Class trafficability program, 1981-1985 [1986, 63p., eng] 41-3028
- Glennie, B.**  
Motion resistance of avalanches on smooth paths [1986, p.115-119, eng] 41-1282
- Glott, S.**  
Avalanche accidents outside the Swiss Alps [1986, p.162-171, ger] 41-2294  
Snow and avalanche conditions in the Swiss Alps [1986, p.45-106, ger] 41-2292
- Glockner, P.G.**  
Modelling the mechanical properties of ice [1987, p.159-165, eng] 41-2417  
Nonlinear constitutive model for ice [1985, p.307-321, eng] 41-1357
- Gloersen, P.**  
Aircraft and satellite passive microwave observations of the Bering Sea ice cover during MIZEX West [1986, p.368-377, eng] 41-833
- Glory, A.**  
Avalanche of the century, at the end of January 1986, on Mont Canigou, eastern Pyrenees [1986, p.13-24, fre] 41-870
- Glotov, N.M.**  
Construction of deep foundations [1985, 248p., rus] 41-3125
- Glukhikh, V.G.**  
Automatic control system for diesel ventilation aggregates of air-cushion vehicles [1987, p.38-39, rus] 41-3392
- Glushkin, A.A.**  
Dust control on quarry roads at subzero temperatures [1985, p.135-136, rus] 41-2771
- Glushkov, G.I.**  
Rigid surfaces for roads and airports [1987, 255p., rus] 41-4151
- Glushkov, S.M.**  
Observation of "anomalous" spectra of Raman scattering at the water-ice phase transition [1986, p.836-839, rus] 41-3686
- Gnat, L.V.**  
Reaction of tundra vegetation to petroleum pollution induced by drilling [1986, p.82-93, rus] 41-1171
- Gnedovskaya, M.I.U.**  
Soviet glaciological studies in 1985 [1986, p.3-10, rus] 41-1632
- Gnidyl, A.**  
Winter training of soldiers for driving commander's vehicle [1986, p.76-78, rus] 41-3931
- Gobin, D.**  
Moving boundary problem: heat conduction in the solid phase of a phase-change material during melting driven by natural convection in the liquid [1986, p.1669-1681, eng] 41-2065
- Gobinathan, R.**  
Ice nucleating behaviour of PbI<sub>2</sub> in the presence of soluble salts [1981, p.1527-1533, eng] 41-2255  
X-ray diffraction and ice nucleation studies of AgI-AgCl solid solutions [1986, p.1005-1009, eng] 41-2467
- Goddard, J.W.F.**  
Dual polarisation radar measurements of the evolution of ice in clouds [1984, p.787-790, eng] 41-4418
- Godfrey, R.N.**  
Engineering surveys along the Trans-Alaska Pipeline [1986, 85p., eng] 41-799
- Godgins, D.O.**  
Research priorities in Canadian waters [1986, p.295-332, eng] 41-251
- Goff, R.D.**  
Applications of spray ice and rubble ice for Arctic offshore exploration [1987, p.1-7, eng] 41-2395  
Proceedings [1987, 4 vols., eng] 41-2394
- Gogineli, S.P.**  
Radar backscatter from summer and ridged sea ice, and design of short-range radars [1985, 142p., eng] 41-2580
- Gogolev, E.S.**  
Calculation of permafrost thawing at the bottom of a water reservoir, accounting for settlement [1986, p.102-104, rus] 41-2545  
Heat release during agitated water movement near the ice surface [1985, p.14-16, rus] 41-1816  
Heat transfer from waves impacting on ice surface [1986, p.58-62, eng] 41-1854
- Golkman, I.A.A.**  
Studying hydraulic drive of drilling equipment at low temperatures [1978, p.63-68, rus] 41-1323
- Golkman, M.R.**  
Increase in the borehole drilling rates and reduction in the duration of pile freezing in permafrost through the use of a steam vibro-leading machine [1986, p.20-23, rus] 41-4616  
More precise definition of computed permafrost temperatures in beds of buildings and structures [1986, p.188-192, eng] 41-2945  
Non-steady-state heat exchange of linear underground constructions with a thawing (freezing) soil [1987, p.781-785, eng] 41-3241
- Golkman, V.V.**  
Experiments with desalting brines [1986, p.208-214, rus] 41-2180  
Hydrologic investigations in the Mimer River basin (Spitsbergen) in 1983 [1986, p.161-166, rus] 41-127  
Hydrological investigations in the Mimer River basin, Svalbard, in 1983 [1986, p.309-316, eng] 41-3622
- Gol'denberg, M.M.**  
Calculating mean temperature of concrete during the cooling of structures [1986, p.126-130, rus] 41-2759
- Goldenberg, S.D.**  
Climate simulation and change: a simple energy balance climate model [1985, 212p., eng] 41-2579
- Gol'din, A.L.**  
Determination of the ice load on elements of marine hydraulic structures [1987, p.417-420, eng] 41-2601
- Golding, D.L.**  
Snow distribution patterns in clearings and adjacent forest [1986, p.1931-1940, eng] 41-2466
- Gol'dis, L.D.**  
Cryogenic preparation of cohesive rocks [1986, p.15-17, rus] 41-3768  
Thermal break-up of frozen cohesive rocks [1986, p.68-69, rus] 41-3765
- Goldschmidt, A.**  
Morphological and chemical data on microparticles in antarctic snows [1986, p.99-103, eng] 41-2463
- Goldstein, R.V.**  
Ice fracture mechanics and some of its applications [1986, p.197-210, eng] 41-1096
- Goldthwait, R.P.**  
Observed processes of glacial deposition in Glacier Bay, Alaska [1986, 167p., eng] 41-2974
- Golenetskii, S.P.**  
Estimating chemical composition of vegetation, soils and natural waters in the central and southern taiga [1986, p.64-72, rus] 41-2347

- Golikov, A.N.**  
Peculiarities of ecosystems distribution in the Barents Sea [1986, p.7-8, rus] 41-2386
- Gollitsina, E.F.**  
Using a model of capillary porous body for calculating water seepage into soil [1986, p.108-116, rus] 41-3589
- Golli, O.R.**  
Regularities governing frost heave of ground and prospects of their use in construction [1986, p.53-61, rus] 41-3446  
Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant [1985, p.52-56, rus] 41-3127
- Golosov, V.V.**  
Ice dynamics in the Weddell Sea, 1980 [1986, p.103-108, rus] 41-2723
- Golovchanskii, F.I.**  
Experimental study of maneuverability of icebreakers and ships in sea ice [1986, p.276-297, eng] 41-2279
- Golokova, R.G.**  
Influence of atmospheric circulation on thermal regime and ablation of the Tuyuksu Glacier [1986, p.23-34, 148-152, rus] 41-4336
- Golovnev, S.G.**  
Calculating mean temperature of concrete during the cooling of structures [1986, p.126-130, rus] 41-2759
- Golubev, V.I.**  
Yeasts from Arctic East Siberian tundra [1986, p.609-612, rus] 41-1825
- Golubev, V.N.**  
Forecasting the conditions of formation, structure and strength of ice covers on surfaces of solid bodies [1986, p.121-128, rus] 41-2164  
Kinetics and mechanism of homogeneous crystallization of water [1986, p.5-10, rus] 41-2146
- Golubeva, S.A.**  
Designing moorings built of fused enlarged blocks [1986, p.25-26, rus] 41-2788
- Golz, W.**  
Resistance of concrete pavements to frost, and chemical deicing agents [1987, p.87-92, ger] 41-3547
- Gominho, L.C.**  
Turbulent free convection on a large vertical icewall in seawater [1984, 7p., eng] 41-1787
- Gonchar, L.G.**  
New methods of determining ice and wind loads during icing [1986, p.37-38, rus] 41-1923
- Goncharov, V.S.**  
Calculation of parameters of the process of artificial freezing of ground around a cylindrical cavity, allowing for thermal diffusion of moisture [1986, p.21-24, rus] 41-3770
- Goncharov, V.V.**  
Designing moorings built of fused enlarged blocks [1986, p.25-26, rus] 41-2788  
Improvement of technology and quality control of concreting moorings in the northeastern Ob'-Irtysh Basin [1986, p.59-68, rus] 41-2910
- Gonda, K.**  
Unfrozen compartmentalized water in gels and its anomalous crystallization during warming [1986, p.5420-5426, eng] 41-2107
- Gonda, T.**  
Growth form of ice crystals grown in air at low supersaturation and their growth mechanism [1986, p.30-37, eng] 41-3655
- Gong, N.**  
Determination of ice crystal growth parameters in a new supercooled cloud tunnel [1982, p.325-328, eng] 41-25  
Microphysical origin of graupel and hail [1984, p.257-260, eng] 41-4395
- Gonopol'skaya, A.F.**  
Calculational method for determination of carburetor icing rate [1985, p.544-546, eng] 41-2944
- Good, W.**  
Pattern recognition of air photographs for estimation of snow reserves [1987, p.76-80, eng] 41-4439
- Goodison, B.E.**  
Design, instrumentation and operation of a snowmelt runoff plot [1984, p.219-223, eng] 41-1963  
Snowmelt acidic shock study in south central Ontario [1986, p.131-138, eng] 41-2618
- Goodman, R.H.**  
*In situ* burning of oil in experimental ice leads [1987, 27p., eng] 41-3075  
Oil motion during lead closure [1987, 13p., eng] 41-4529
- Goodrich, L.E.**  
Core temperature measurements on three Arctic icebergs [1987, p.103-107, eng] 41-2409  
Field measurements of soil thermal conductivity [1986, p.51-59, eng] 41-2323
- Goodwin, R.**  
Recent developments at the Arctic Science and Technology Information System [1986, p.145-148, eng] 41-972
- Goodwin, R.G.**  
Development of collapsed glacial topography in the Adams Inlet, Alaska, U.S.A. [1987, p.55-59, eng] 41-3596
- Gopal, K.R.**  
Endochronic constitutive modeling of marine fiber reinforced concrete and frozen soil [1985, p.845-856, eng] 41-670
- Gopal, R.K.**  
Endochronic constitutive modeling of marine fiber reinforced concrete and frozen soil [1986, 155p., eng] 41-2587
- Goral'chuk, M.I.**  
Basic factors governing the variabilities in engineering-geological conditions in northwestern Siberia [1986, p.41-46, rus] 41-2817  
Cryogenic-inversion ridges of northwestern Siberia [1986, p.128-132, rus] 41-2829
- Gorbachev, V.N.**  
Microbiocenoses and biologic activity in forest soils of the Angara-Yenisey region [1985, p.35-47, rus] 41-4110
- Gorbovskaya, A.D.**  
Changes in chemical composition of meltwater in areas of intensive human activities [1986, p.60-68, rus] 41-3210
- Gorbulnov, A.P.**  
Cryolithozone of Alpine deserts in Central Asia [1986, p.100-104, rus] 41-114  
Cryolithozone of central Asia [1986, 57p., rus] 41-2349  
Peculiarities of mapping rock glaciers [1986, p.5-22, rus] 41-3482  
Rock glaciers [1986, p.73-77, rus] 41-2535
- Gorbulnov, B.Z.**  
Formation kinetics of ice crystals on aerosol particles in supercooled fog. Effect of water vapor exhaustion [1986, p.333-334, eng] 41-3162  
Kinetics of ice nucleation of aerosol particles in supercooled fog 2. Ice crystal growth and precipitations [1987, p.269-275, eng] 41-4363  
Kinetics of ice nucleation on aerosol particles in supercooled fog 1. The influence of water vapour depletion [1987, p.261-267, eng] 41-4362  
Small-volume fog chamber with automatic recording of ice crystals [1986, p.248-249, eng] 41-3161
- Gorbulnov, I.U.A.**  
Nature of winter ruptures in sea ice covers [1986, p.131-134, rus] 41-121  
On the causes of continuity disturbance of sea-ice cover in winter [1986, p.110-116, rus] 41-4204  
Peculiarities of ice movement in the Arctic Basin according to data of the FGGE automatic buoys [1986, p.77-88, rus] 41-4199  
Study of ice movement in the Arctic Ocean by means of the FGGE automatic buoys [1986, 96-103, rus] 41-4202
- Gorcharuk, L.C.**  
Human activities impact on the biological activity of mountain soils [1986, p.41-45, rus] 41-456
- Gordeeva, G.I.**  
Compiling maps for evaluating potential thermokarst sagging [1986, p.77-95, rus] 41-2087
- Gordin, S.**  
Design for a novel icebreaker assisting Arctic LNG vessels [1986, p.257-278, eng] 41-2031
- Gordon, A.L.**  
Recurring polynyas over the Cosmonaut Sea and the Maud Rise [1987, p.2819-2833, eng] 41-3080  
Review of observations carried out by american specialists during the Soviet-American expedition "Weddell-POLEX-81" [1986, p.27-37, rus] 41-4184
- Gordon, G.L.**  
Hydrometeor distributions in California rainbands [1982, p.207-210, eng] 41-17
- Gordon, J.**  
Movement on the ice front [1986, p.294-299, eng] 41-1512
- Gordon, J.E.**  
Beach forms and changes associated with retreating glacier ice, South Georgia [1986, p.15-24, eng] 41-1844  
Glacial lake drainage near Søndre Strømfjord, West Greenland [1986, p.304, eng] 41-692
- Gordon, L.I.**  
Spring distributions of density, nutrients, and phytoplankton biomass in the ice edge zone of the Weddell-Scotia Sea [1987, p.7181-7190, eng] 41-4270
- Gordon, M.R.**  
Canada and polar science [1987, 116p. + appends., eng] 41-3414
- Gordon, R.B.**  
Microstructure and the resistance of rock to tensile fracture [1985, p.11,533-11,546, eng] 41-496
- Gorelik, L.V.**  
Consolidation equations of Biot-Florin for three-phase soils [1985, p.56-62, rus] 41-3128
- Gorelova, A.P.**  
Introduction of aconites into the Subarctic [1986, 116p., rus] 41-1927
- Goriachev, V.S.**  
Nitrogen cryostat for study of Moessbauer scattering [1987, p.981-983, eng] 41-3160
- Gorlach, I.A.**  
Using image recognition in classifying conditions of icing [1985, p.62-71, rus] 41-1196
- Gorman, M.R.**  
Digital radio echo-sounding and navigation recording system [1987, p.81-84, eng] 41-4440
- Gorokhov, E.N.**  
Determining heat conductivity coefficients of coarse grained materials used in embankment construction [1985, p.105-110, rus] 41-3130
- Goroshankina, S.M.**  
Hydromeliorative regionalization of West Siberia from space photographs [1984, p.16-25, rus] 41-4087  
Identification of regional features of West Siberian swamps on space photographs [1986, p.29-37, rus] 41-817  
Using satellites in mapping West Siberian forests [1986, p.34-43, rus] 41-3515  
Using spaceborne photography data in studying forests and swamps [1986, p.169-189, rus] 41-3973
- Gorshel'nik, K.**  
Ships used in the exploitation of offshore deposits [1987, p.221-231, rus] 41-4147
- Goslink, J.P.**  
Northern lake and reservoir modeling [1987, p.281-300, eng] 41-3038
- Gospodinov, D.G.**  
Ground water flooding of towns in Siberia, the Far East and the Far North [1985, p.27-33, rus] 41-1363
- Goto, K.**  
Reports of several international and domestic symposia [1986, p.93-112, jpn] 41-443
- Gotovtsev, S.P.**  
Relation between the susceptibility of permafrost landscapes and topographic dissection [1986, p.113-121, rus] 41-3492
- Gould, R.W., Jr.**  
Phytoplankton from the southwestern Atlantic Ocean [1985, p.143-145, eng] 41-2959
- Gould, W.G.**  
Substantial changes in the coastline of Antarctica revealed by satellite imagery [1987, p.577-583, eng] 41-3856
- Govoni, J.**  
Computer interfacing of meteorological sensors in a severe weather and high RFI environment [1985, p.205-211, eng] 41-1496
- Govoni, J.W.**  
Analysis of selected ice accretion measurements on a wire at Mt. Washington [1985, p.34-43, eng] 41-1482  
Icing and wind loading on a simulated power line [1986, p.23-27, eng] 41-2967  
Portable hot water ice drill [1986, p.549-564, eng] 41-2676  
Portable hot-water ice drill [1987, p.57-64, eng] 41-4216
- Govorenkov, B.F.**  
Role of humus-formation processes in the development of soil profiles in Arctic deserts of October Revolution Island in Severnaya Zemlya [1986, p.126-135, rus] 41-4566  
Soil formation on coastal plains of the Oktyabr'skaya Revolyutsiya Islands [1986, p.41-51, rus] 41-3865
- Govorukha, L.S.**  
Human factors in the development of basic Arctic geosystems [1986, p.24-30, rus] 41-3863  
Reserved zones of Franz Josef Land [1986, p.7-18, rus] 41-3861
- Govorushko, S.M.**  
Morphology and lithogenesis of rock streams [1986, 120p., rus] 41-2901
- Gow, A.J.**  
Acoustical reflection and scattering from the underside of laboratory grown sea ice: measurements and predictions [1986, p.1486-1494, eng] 41-3068  
Annealing recrystallization in laboratory and naturally deformed ice [1987, p.(C1)271-(C1)276, eng] 41-3957  
Chemical fractionation of brine in the McMurdo Ice Shelf, Antarctica [1986, p.307-313, eng] 41-4281  
Crystal structure and salinity of sea ice in Hebron Fjord and vicinity, Labrador [1987, 18p., eng] 41-4144  
Crystal structure of Fram Strait sea ice [1986, p.20-29, eng] 41-3056  
Microwave dielectric, structural, and salinity properties of simulated sea ice [1986, p.832-839, eng] 41-2297  
Physical properties of sea ice discharged from Fram Strait [1987, p.436-439, eng] 41-2806  
Physical properties of summer sea ice in the Fram Strait [1987, p.6787-6803, eng] 41-4238  
Restrains on thin section analysis of grain growth in unstrained polycrystalline ice [1987, p.(C1)277-(C1)281, eng] 41-3958  
Structure and dielectric properties at 4.8 and 9.5 GHz of saline ice [1986, p.14,281-14,303, eng] 41-1857
- Gowda, S.**  
Development of new advanced materials for sub-arctic and arctic offshore structures [1986, p.833-968, eng] 41-1135
- Gowda, S.S.**  
Ice forces on model Arctic structures [1986, p.693-706, eng] 41-1125
- Gower, J.F.R.**  
Motion of ice in the Beaufort Sea from satellite and aircraft images [1986, p.509-522, eng] 41-162
- Goyal, V.**  
Jurisdiction and management of Arctic marine transportation [1986, p.338-349, eng] 41-2725

- Gozman, A.M.**  
Bridge piers without grillage under complicated natural conditions [1987, p.16-17, rus] 41-2793
- Grabe, G.**  
Reinforced ice as a construction material—creep of reinforced ice beams [1986, p.793-806, eng] 41-1133
- Graham, B.**  
Evaluation of sea bottom ice scour models [1986, 71p. + graphs., eng] 41-273  
Review of deterministic ice-scour models [1986, p.97-108, eng] 41-3097
- Graham, C.A.**  
Impact of offshore permafrost on oil and gas production [1986, p.35-47, eng] 41-2512
- Grakovich, V.F.**  
Engineering protection of mountainous regions from dangerous glacial processes [1986, p.102-104, 214-216, rus] 41-4350
- Gramberg, I.S.**  
Seas of the Soviet Arctic. Vol.9 [1984, 280p., rus] 41-571
- Granat, L.**  
Deposition of atmospheric trace metals in northern Sweden as measured in the snowpack [1986, p.27-43, eng] 41-1260  
Experimental study of the dry deposition of gaseous nitric acid to snow [1986, p.1165-1170, eng] 41-795
- Granberg, H.B.**  
Tests of new snow density samplers [1984, p.224-228, eng] 41-1964
- Granger, R.J.**  
*In situ* measurements of moisture and salt movement in freezing soils [1986, p.696-704, eng] 41-1930  
Snow management practices for increasing soil water reserves in frozen prairie soils [1985, p.256-263, eng] 41-452
- Grant, L.O.**  
Budget analysis of liquid water, vapor and ice during a mid-December Colorado orographic cloud system [1982, p.572-575, eng] 41-70  
Continuous spatial and temporal variations of supercooled water during wintertime mountain storms using a passive microwave radiometer [1984, p.47-50, eng] 41-4371  
Correlation of snow crystal habit, number flux and snowfall intensity from ground observations [1982, p.485-486, eng] 41-63  
Development of ice crystal concentrations in stably stratified orographic cloud systems [1984, p.191-194, eng] 41-4390  
Inventory of ice crystal concentrations in a series of stable orographic cloud systems [1982, p.584-587, eng] 41-71  
Kinetics of ice crystal formation in "dynamic" cloud conditions [1984, p.189-190, eng] 41-4389  
Microphysical growth processes during a rapidly evolving orographic cloud system [1982, p.481-484, eng] 41-62  
Spatial and temporal variations of cloud liquid water determined by aircraft and microwave radiometer measurements in northern Colorado orographic storms [1982, p.477-480, eng] 41-61  
Study of ice crystal formation in a stably stratified orographic cloud [1982, p.488-490, eng] 41-64
- Grattan-Bellew, P.E.**  
Drilling and slotting of ice and permafrost with rotating high pressure water jets [1986, p.177-187, eng] 41-2936
- Gratz, A.J.**  
Oceanographic influences on the sea ice cover in the Sea of Okhotsk [1981, 18p., eng] 41-4327
- Grave, N.A.**  
Methods of predicting destructive cryogenic phenomena associated with the development of an area from the example of NW Siberia [1986, p.44-49, eng] 41-1791  
Problems of geocryological mapping [1986, 172p., rus] 41-3481
- Graves, J.H.**  
Observations of grain boundary sliding in ice bicrystals [1986, c12p., eng] 41-2133
- Graves, S.**  
Beaufort Sea coastal currents: a divergence near Barter Island, Alaska? [1987, p.139-142, eng] 41-3468
- Gravis, G.F.**  
Cryogenic structure of the sedimentary mantle in southern central Yakut lowland [1986, p.60-65, rus] 41-2820  
Formation of injection ice during subaqueous freezing of sediments in coastal zones of water bodies [1986, p.108-112, rus] 41-116  
New information on rock streams [1983, p.103-105, rus] 41-4485  
Possibilities of landscape indication in engineering-geological surveys of southern Central Yakutia [1986, p.85-96, rus] 41-3489  
Subsurface ice in sand alluvium of the Lena River [1972, p.73-79, rus] 41-3748
- Gray, A.L.**  
Seasonal and regional variations of active/passive microwave signatures of sea ice [1987, p.159-173, eng] 41-3316
- Gray, D.M.**  
*In situ* measurements of moisture and salt movement in freezing soils [1986, p.696-704, eng] 41-1930  
Snow management practices for increasing soil water reserves in frozen prairie soils [1985, p.256-263, eng] 41-452
- Green, A.R.**  
Circum-Arctic petroleum potential [1986, p.101-130, eng] 41-2606
- Green, C.B.**  
Alaska's mineral industry, 1985 [1986, 68p., eng] 41-569
- Green, G.M.**  
Measurements of ice motion in Lake Erie using satellite-tracked drifter buoys [1987, 22p., eng] 41-4577
- Greenan, H.J.**  
Snowmelt lysimeter for research applications [1984, p.209-218, eng] 41-1962
- Greenberg, J.M.**  
Evolution of ices from interstellar space to the solar system [1985, p.185-204, eng] 41-1705
- Greene, G.M.**  
Techniques to measure the spectral reflectance of ice [1984, p.384-391, eng] 41-1356
- Greenler, R.G.**  
Multiple-scattering effects in halo phenomena [1987, p.591-599, eng] 41-3152
- Greenspan, E.**  
Water jet ice penetration [1986, p.619-622, eng] 41-2680
- Greenwald, T.J.**  
Three parameter representation of the shape and size distributions of hailstones—a case study [1987, p.1062-1070, eng] 41-3851
- Greenwalt, R.N.**  
Point probability distributions of frozen soil [1986, p.1681-1686, eng] 41-2501
- Gregoire, G.B.**  
Computer aided thermal analysis of heat flow within the floor of an ice skating rink [1986, p.263-285, eng] 41-1598
- Gregorek, G.M.**  
Results of an experimental program investigating the effects of simulated ice on the performance of the NACA 63A415 airfoil with flap [1984, 183p., eng] 41-3255
- Gregory, W.E.**  
Water jet ice penetration [1986, p.619-622, eng] 41-2680
- Grener, E.F.**  
Mm wave backscatter from snow on the surface at 35 and 94 GHz [1986, p.6.3.1-6.3.5, eng] 41-98
- Grenfell, T.C.**  
Determination of the liquid water content of snow by the dye dilution technique [1986, p.295-298, eng] 41-1297  
Multifrequency passive microwave observations of first-year sea ice growth in a tank [1986, p.826-831, eng] 41-2296  
Surface-based passive microwave observations of sea ice in the Bering and Greenland Seas [1986, p.378-382, eng] 41-834
- Grenier, I.**  
Dating ice-wedge growth in subarctic peatlands following deforestation [1986, p.724-727, eng] 41-618
- Griggs, D.J.**  
Effect of rimer surface temperature on ice splinter production by the Hallett-Mossop process [1986, p.1254-1256, eng] 41-1478  
Laboratory simulations of graupel growth [1984, p.163-166, eng] 41-4382  
Replication of ice crystals using Formvar: techniques and precautions [1986, p.547-551, eng] 41-3222  
Secondary ice particle production by rime fragmentation and crystal breakup [1984, p.199-202, eng] 41-4392
- Grigor'ev, P.A.**  
One-story residential buildings with monolithic foundation plates built on weak fills and frost-heaving ground [1985, p.37-39, rus] 41-292  
Studying temperature regime of floor surfaces in residential buildings on slab foundations [1985, p.113-114, rus] 41-333
- Grigor'ev, R.S.**  
Working fitness and durability of equipment in the North [1985, p.5-13, rus] 41-2847
- Grigor'eva, N.N.**  
Quantitative estimation of changes in physiographic structure of the Upper Kolyma basin induced by industrial activities [1986, p.9-13, rus] 41-4467
- Grigorian, S.S.**  
Mathematical model and forecasts of thermokarst evolution [1986, p.45-49, rus] 41-1636  
Numeric modeling of evolution of the Greenland ice sheet [1984, p.892-903, eng] 41-2074
- Grimaldy, G.**  
Carbonation of concrete with low-calcium fly ash and granulated blast furnace slag: influence of air-entraining agents and freezing-and-thawing cycles [1986, p.541-562, eng] 41-1153
- Grin, A.M.**  
Remote sensing in the study of elements of moisture supply to geosystems [1986, 113p., rus] 41-2732
- Grinstead, G.P.**  
Pliocene variations in the position of the Antarctic Convergence in the southwest Atlantic [1986, p.197-232, eng] 41-1264
- Grinstead, J.**  
Global ship ice impact forces determined from full-scale tests and analytical modeling of the icebreakers *Canmar Kigoriak* and *Robert LeMeur* [1984, p.253-282, eng] 41-875  
Updating the Canadian ice class rules through research and development [1986, p.66-104, eng] 41-2024
- Grobe, H.**  
Late Pleistocene sedimentation processes on the antarctic continental shelf off Cape Norvegia eastern Weddell Sea [1986, 121p. + figs., ger] 41-267
- Grobuseck, F.**  
Performance of diesel engine bearings at low temperature [1986, p.477-486, ger] 41-2892
- Gromova, E.I.**  
Studies of migration frost mounds with the use of multiband aerial photographs [1983, p.142-150, rus] 41-4612
- Gromova, T.N.**  
Studies of ice-forming properties of phloroglucinol under field conditions [1986, p.116-123, rus] 41-3465
- Gromtsev, A.N.**  
Pine forest successions in different landscape types of the central taiga subzone in the Karelian ASSR [1985, p.46-61, rus] 41-193
- Grönäs, S.**  
Simulation of polar lows in the Norwegian Sea [1986, p.201-220, eng] 41-1806
- Groote, P.M.**  
Land-ice/sea-ice transition in Ross Ice Shelf ice at J-9, Antarctica [1985, p.66-68, eng] 41-2628  
Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap [1986, p.361-364, eng] 41-2860  
Ross Ice Shelf oxygen isotopes and west antarctic climate history [1986, p.49-67, eng] 41-612
- Grosheva, E.I.**  
Content of mercury in the snow cover of Pribyalk'e [1987, p.56-60, rus] 41-3946
- Grosval'd, M.G.**  
Alimentation intensity of Late Pleistocene glaciers in the eastern half of the USSR [1986, p.56-64, rus] 41-1638  
Underground ice in western Siberia: origin and geological significance [1986, p.173-183, eng] 41-3197
- Grout, B.W.W.**  
Freezing and higher plants [1986, p.203-207, eng] 41-2224
- Grube, P.G.**  
Ice evolution versus precipitation in the Duero Basin [1982, p.218-221, eng] 41-20
- Gruber, N.L.**  
Contribution to the study of sediments in the Bransfield Strait region [1987, p.127-146, por] 41-3156
- Gruell, W.**  
Studying the sensitivity of mass-balance model including calculations of temperature profile inside the glacier [1986, p.34-38, 164-168, eng] 41-1051
- Grulke, N.E.**  
Growth forms, carbon allocation, and reproductive patterns of High Arctic saxifrages [1985, p.241-250, eng] 41-1245
- Grumbe, R.W.**  
"Slow" physics of large continental ice sheets and underlying bedrock and its relation to the Pleistocene Ice Ages [1985, p.11.294-11.302, eng] 41-494
- Grzes, M.G.**  
Origin and evolution of Goes Lake, Spitsbergen [1986, p.122-124, 233-234, rus] 41-4355
- Gu, G.**  
Application of (14)C dating to the studies of glacial geology and geocryology [1986, p.159-165, chi] 41-1463
- Gubeladze, D.O.**  
Dynamic loads of high density mudflow mass on transverse structures [1985, p.356-360, rus] 41-1623
- Gubin, S.V.**  
Buried soils of northeastern Yakutia (the Khallerchinskaya tundra) [1986, p.109-120, rus] 41-2354
- Guddal, J.**  
Imaging radar directional wave observations and hindcast results for the Norwegian Sea storm of 29 Feb. 1984 [1986, p.285-296, eng] 41-1811
- Gudehus, G.**  
Underpinnings with ground freezing [1985, p.203-211, ger] 41-1562
- Gudkovich, Z.M.**  
Numerical modeling of annual cycle of ice cover evolution and seasonal forecasts of ice redistribution in the Soviet Arctic seas [1986, p.71-77, rus] 41-4198
- Gudmundsson, O.**  
Grazing research at northern latitudes [1986, 374p., eng] 41-216
- Guest, P.S.**  
Effect of observed ice conditions on the drag coefficient in the summer East Greenland Sea marginal ice zone [1987, p.6943-6954, eng] 41-4250
- Guha, S.N.**  
Model study of iceberg scouring in North Atlantic [1978, p.2319-2326, eng] 41-2128
- Guljaeva, O.V.**  
Determining the economic and ecological effects of forest utilization in the North [1985, p.33-38, rus] 41-207

- Gal'ko, E.F.**  
Peculiarities of simultaneous calculation of a nonstationary temperature field and the stress-strain state of freezing and thawing massive ground [1986, p.96-106, rus] 41-3452  
Stress-strain state of slopes with complex geological structure and the evaluation of their stability at different temperature regimes [1986, p.106-113, rus] 41-3453
- Gulmizarov, V.**  
Development of hydrocarbon resources in ice-covered areas: an overview [1986, p.111-123, eng] 41-2268
- Guanarata, P.**  
Mathematical model for river ice [1987, p.141-146, eng] 41-4221
- Gundarev, K.A.**  
On the least resistance line of curvilinear blow-out charges detonated in permafrost [1986, p.61-66, rus] 41-2906
- Gunderson, W.**  
Costs to the public due to use of corrosive deicing chemicals and a comparison to alternate winter road maintenance procedures [1983, 35p., eng] 41-4607
- Gundestrup, N.S.**  
Seasat range measurements verified on a D-D ice sheet [1986, p.69-72, eng] 41-741
- Gunn, J.T.**  
1984-1985 current observations in the East Greenland Current: a preliminary description [1986, p.41-53, eng] 41-3058
- Gunter, M.**  
Effect of curing and type of cement on the resistance of concrete to freezing in deicing salt solutions [1987, p.877-899, eng] 41-3711  
Effect of curing and type of cement on the resistance of concrete to frost and de-icing salt [1986, p.57-62, ger] 41-832
- Guo, E.**  
Microphysical structures of hailstones observed on the Xizang plateau [1984, p.91-94, eng] 41-4377
- Guo, S.**  
Features of the climate at Mawson Station, Antarctica [1984, p.41-58, chi] 41-266
- Gurnell, A.M.**  
Glacio-fluvial sediment transfer [1987, 524p., eng] 41-3124  
Ground data inputs to image processing for estimating terrain characteristics for glacio-hydrological analysis [1987, p.45-49, eng] 41-4433
- Gurtsev, V.I.**  
Forest effect on snow reserves and melting in the central taiga of northern Europe [1986, p.11-16, rus] 41-2598
- Gusarova, Z.S.**  
Photo-control tie of the SMP-32 to the MSU-S data and some reflection spectra characteristics of natural objects [1985, p.57-66, rus] 41-1040
- Guser, V.**  
Floating dock [1986, p.18-19, rus] 41-1398
- Guseva, E.V.**  
Mathematical model and forecasts of thermokarst evolution [1986, p.45-49, rus] 41-1636
- Gushchin, V.V.**  
Decelerating force due to flexural and gravitational waves radiated by a load moving on ice [1985, p.385-387, rus] 41-2329
- Gustafson, K.**  
Susceptibility to icing on road pavements: investigations on the E4 at Nyköping, 1982-1985 [1986, 73p. + append., swed] 41-2567
- Guy, E.V.**  
Canadian sea ice information system CSIS: an online computer database for sea ice and iceberg data [1986, p.119-124, eng] 41-969
- Guzli, A.D.**  
Building pile foundations in water-saturated silty clay grounds [1986, p.8-10, rus] 41-878
- Gvakharia, V.K.**  
Geographic modeling of evaporation from water-bodies of mountainous countries [1986, 114p., rus] 41-3366
- Gvozdk, V.I.**  
Determination of the bearing capacity of piles in permafrost by static penetration [1986, p.58-63, eng] 41-1850
- Gzrishtvili, T.G.**  
Aerosol ice-forming activation mechanism [1985, p.309-314, eng] 41-215
- Haagenso, P.L.**  
Nature of ice-forming nuclei in marine air masses [1987, p.291-309, eng] 41-4364
- Haakensen, N.**  
Glacier mapping to confirm results from mass-balance measurements [1986, p.73-77, eng] 41-742
- Haas, R.**  
Cold climate performance of Canadian airport pavements [1987, p.303-332, eng] 41-4027  
Thermally associated fatigue crack growth through asphalt overlays: an experimental investigation [1987, p.453-491, eng] 41-4032
- Hache, R.A.G.**  
Torsional resistance of a single pile in a layered soil [1986, p.1004-1019, eng] 41-3172
- Hachiya, Y.**  
Changes in properties of asphalt concretes due to aging [1987, p.85-116, eng] 41-4022
- Hadipour, K.**  
Development of a method to evaluate the low temperature tensile properties of asphalt concrete [1986, p.156-189, eng] 41-2204
- Hadley, R.D.**  
Ice and iceberg contingency planning and management for offshore oil and gas operations [1986, p.323-339, eng] 41-1104
- Haerli, W.**  
Fluctuations of glaciers 1975-1980, Vol. IV [1985, 265p. + maps, eng] 41-1214  
Mapping the distribution of buried glacier ice—an example from Lago Delle Locce, Monte Rosa, Italian Alps [1986, p.78-81, eng] 41-743
- Haerle, R.N.**  
Effects of loading history on the compressive strength of polycrystalline ice [1986, c25p., eng] 41-2130
- Hajnal, Z.**  
Reflection experiment on a floating ice platform [1987, p.201-208, eng] 41-2948
- Hakala, H.**  
Using acoustic navigation during different research and production situations [1986, p.145-161, eng] 41-1094
- Hakala, R.**  
Ice forces on model Arctic structures [1986, p.693-706, eng] 41-1125
- Hakkarainen, T.**  
Properties of slag concrete [1986, 43p., fin] 41-604
- Hakkinen, S.**  
Constitutive law for sea ice and some applications [1987, p.81-90, eng] 41-4275  
Feedback between ice flow, barotropic flow, and baroclinic flow in the presence of bottom topography [1987, p.3807-3820, eng] 41-3062  
Upwelling at the ice edge: a mechanism for deep water formation [1987, p.5031-5034, eng] 41-3344
- Haldeman, J.S.**  
Sloped roof snow loads using simulation [1987, p.1820-1833, eng] 41-4173
- Hale, D.**  
Unique frost thawers [1986, p.31-32, eng] 41-175
- Hale, L.Z.**  
NANA region environment, a summary of available information [1979, 14p. + plates, eng] 41-1781
- Halfpenny, J.C.**  
Bibliography of alpine and subalpine areas of the Front Range, Colorado [1986, 114p., eng] 41-697
- Hall, D.**  
Molecular-packing analysis of the crystal structures of ice [1985, p.169-172, eng] 41-2334
- Hall, D.K.**  
Characterization of snow and ice reflectance zones on glaciers using Landsat thematic mapper data [1987, p.104-108, eng] 41-4444  
Influence of depth hoar on microwave emission from snow in northern Alaska [1987, p.225-231, eng] 41-3033  
Microwave snow signatures (1.5 mm to 3 cm) over Alaska [1987, p.153-160, eng] 41-4492  
Nimbus-7 SMMR derived global snow cover parameters [1987, p.39-44, eng] 41-4432  
Regional differences in snowpacks in the northern U.S. as seen by the Nimbus-7 SMMR [1984, p.67-74, eng] 41-1948
- Hall, K.**  
Evidence in favour of an extensive ice cover on subantarctic Kerguelen Island during the last glacial [1984, p.225-232, eng] 41-481  
Freeze-thaw simulations on quartz-micaschist and their implications for weathering studies on Signy Island, Antarctica [1986, p.19-30, eng] 41-2359  
Utilization of the stress intensity factor ( $K_{sub IC}$ ) in a model for rock fracture during freezing: an example from Signy Island, the Maritime Antarctic [1986, p.53-60, eng] 41-801
- Hall, R.T.**  
Photogrammetric observations of the lateral melt of sea ice floes [1987, p.7045-7048, eng] 41-4259
- Hall, W.D.**  
Visual cloud histories related to first echo formation in northeast Colorado cumulus [1982, p.342-345, eng] 41-30
- Hallam, S.D.**  
Advances in ice mechanics in the United Kingdom [1987, p.1-5, eng] 41-2930  
Effect of sub-surface irregularities on the strength of multi-year ice [1987, p.225-238, eng] 41-2426  
Explicit technique for calculating first year ice loads on structures [1987, p.267-272, eng] 41-2431
- Hallbrucker, A.**  
Calorimetric study of the vitrified liquid water to cubic ice phase transition [1987, p.503-505, eng] 41-3312  
Cubic ice from liquid water [1987, p.601-602, eng] 41-3637
- Hallet, B.**  
Dynamics of periglacial sorted circles in western Spitsbergen [1986, p.81-99, eng] 41-792
- Physical basis of frost weathering: toward a more fundamental and unified perspective [1986, p.27-32, eng] 41-1185
- Hallett, J.**  
Analysis of silver in individual ice particles after cloud seeding [1982, p.378-380, eng] 41-39  
Case studies of ice distribution in hurricanes [1982, p.335-337, eng] 41-28  
Development of precipitation near the top of a maritime convective cloud [1982, p.211-214, eng] 41-18  
Experimental study of the ice column habit transitions [1982, p.100-102, eng] 41-6  
Faceted snow crystals [1987, p.581-588, eng] 41-3151  
Glaciating characteristics of Montana and Florida summer cumuli: Comparisons based on observations and modeling [1982, p.374-377, eng] 41-38  
Laboratory investigation of the influence of liquid water content on the temperature dependence of secondary ice crystal production during soft hail growth [1982, p.123-126, eng] 41-12  
Observations of ice particle charge in convective clouds in Florida and Montana [1982, p.566-567, eng] 41-67
- Hallikainen, M.**  
Mapping of snow-cover parameters by a spaceborne microwave radiometer [1986, p.209-214, eng] 41-3899
- Hallikainen, M.T.**  
Dielectric properties of snow in the 3 to 37 GHz range [1986, p.1329-1340, eng] 41-2313  
Retrieval of the water equivalent of snow cover in Finland by satellite microwave radiometry [1986, p.855-862, eng] 41-2300
- Hamill, P.**  
Formation of polar stratospheric clouds [1983, p.2055-2067, eng] 41-2004
- Hamilton, T.D.**  
Geologic studies in Alaska by the U.S. Geological Survey during 1986 [1987, 195p., eng] 41-3466
- Hamley, T.C.**  
Antarctic iceberg distribution and dissolution [1986, p.242-251, eng] 41-685  
Ice-core drilling site at Law Dome summit, Wilkes Land, Antarctica [1986, 34p., eng] 41-459
- Hammer, C.U.**  
Traces of Icelandic eruptions in the Greenland Ice Sheet [1984, p.51-65, eng] 41-804
- Hammett, D.S.**  
Drilling offshore western Greenland—ice [1978, p.119-128, eng] 41-2122
- Hampton, M.A.**  
Quantitative study of slope instability in the Gulf of Alaska [1978, p.2307-2318, eng] 41-2127
- Hamran, S.-E.**  
Ocean wave phenomena observed with an adaptive multifrequency radar system [1986, p.311-327, eng] 41-1813
- Hamza, H.**  
Numerical study of the statistical visco-elastic response of ice under different loading conditions [1987, p.151-157, eng] 41-2416
- Hanafusa, N.**  
Dynamical properties of ice surfaces studied by nuclear magnetic resonance [1986, p.1-10, jpn] 41-3874
- Hancock, P.J.**  
Ground data inputs to image processing for estimating terrain characteristics for glacio-hydrological analysis [1987, p.45-49, eng] 41-4433
- Handa, Y.P.**  
Difference in energy between cubic and hexagonal ice [1986, p.7009-7010, eng] 41-188  
High-density amorphous ice. 3. Thermal properties [1986, p.2766-2770, eng] 41-2570
- Handfelt, L.D.**  
Performance of soil-aggregate-fabric systems in frost-susceptible roads, Linn County, Iowa [1981, p.6-14, eng] 41-1038
- Hankins, D.**  
Canyon Creek bridge [1986, p.43-47, eng] 41-827
- Hanley, K.**  
Physics of snow and ice control on roads and highways [1979, 15p., eng] 41-233
- Hanna, A.J.**  
Monitoring of thawing permafrost slopes: interprovincial pipe line [1986, p.133-151, eng] 41-2520
- Hansen, A.C.**  
Constitutive theory for high rate multiaxial deformation of snow [1986, 148p., eng] 41-2586  
Granular structure of snow: an internal-state variable approach [1986, p.434-438, eng] 41-4298  
Role of fracture in the attenuation rate of stress waves in snow [1987, p.207-212, eng] 41-4496
- Hansen-Bristow, K.J.**  
Turf-banked terraces in the Olympic Mountains, Washington, U.S.A. [1985, p.261-270, eng] 41-1247
- Hansen, D.P.**  
Thermal hole opener [1987, p.51-56, eng] 41-4215  
Thermal hole opener [1986, p.565-574, eng] 41-2677
- Hansen, E.S.**  
Lichens from central East Greenland [1982, 36p., eng] 41-3788



- Hansen, R.**  
Big HSWA-ice-tank two years in service now (1986, p.1487-1491, ger) 41-2194
- Hansman, R.J. Jr.**  
Microwave ice prevention system (1982, 4 col., eng) 41-1995
- Hanson, J.D.**  
Beach forms and changes associated with retreating glacier ice, South Georgia (1986, p.15-24, eng) 41-1844
- Hanson, B.**  
Borehole deformation experiments, Barnes Ice Cap, Canada (1986, p.261-276, eng) 41-1293
- Hara, Y.**  
Effects of freezing temperature on the flexural properties of urea ice (1986, p.31-37, jpn) 41-3781
- Harada, K.**  
Accumulation rate of Mizuho Station, East Antarctica: an application of the Pb-210 method (1986, p.159-165, eng) 41-1472
- Harbitz, A.**  
Big waves from polar lows (1986, p.297-309, eng) 41-1812
- Harder, P.J., II**  
Nimbus 7 SMMR investigation of snowpack properties in the northern Great Plains for the winter of 1978-79 (1987, p.35-46, eng) 41-3314
- Harding, B.W.**  
High latitude drilling in the ocean drilling program (1986, p.83-106, eng) 41-1092
- Hardwick-Witman, M.N.**  
Aerial survey of a salt marsh: ice rafting to the lower intertidal zone (1986, p.379-383, eng) 41-2244
- Hare, M.J.**  
Conditions associated with frost action in rocks: a field and laboratory investigation (1985, 168p., eng) 41-3646
- Harimaya, T.**  
Regional characteristics of graupel formation (1984, p.167-168, eng) 41-4383
- Harr, P.A.**  
Functional description for modification of the polar ice forecast subsystem—Arctic (1981, 20p., eng) 41-2191  
Users manual for a polar ice forecast subsystem—Arctic (1981, 18p., eng) 41-2328
- Harr, R.D.**  
Comparative snow accumulation and melt during rainfall in forested and clear-cut plots in the western Cascades of Oregon (1987, p.135-142, eng) 41-2465  
Effects of clearcutting on rain-snow runoff in western Oregon: a new look at old studies (1986, p.1095-1100, eng) 41-72
- Harris, C.**  
Detection of high altitude permafrost in Jotunheimen, Norway using seismic refraction techniques: an assessment (1986, p.19-26, eng) 41-1184  
Mechanisms of mass movement in periglacial environments (1987, p.531-559, eng) 41-3045  
Studies on a gelification lobe: Jotunheimen, Norway: C-14 chronology, stratigraphy, sedimentology and palaeoenvironment (1986, p.345-360, eng) 41-3565
- Harris-Hobbs, R.L.**  
Field evidence supporting quantitative predictions of secondary ice production rates (1987, p.1071-1082, eng) 41-3852
- Harris, J.**  
Ground freezing techniques (1986, p.11-12, 51, eng) 41-2893
- Harris, J.R.**  
Wind, earthquake, snow, and hail loads on solar collectors (1981, 88p., eng) 41-173
- Harris, S.A.**  
Distribution and zonation of permafrost along the eastern ranges of the Cordillera of North America (1986, p.107-118, eng) 41-3581  
Permafrost environment (1986, 276p., eng) 41-955
- Harrison, K.**  
Ice growth in supercooled solutions of antifreeze glycoprotein (1987, p.241-243, eng) 41-4228
- Harrison, W.**  
Discharges of turbid water during mini-surges of Variegated Glacier, Alaska, U.S.A. (1986, p.195-207, eng) 41-679
- Harrison, W.D.**  
Short period motion events on Variegated Glacier as observed by automatic photography and seismic methods (1986, p.82-89, eng) 41-744
- Harris, R.C.**  
Methane flux from northern peatlands (1985, p.652-654, eng) 41-2744
- Hartje, D.T.**  
Convective loop heat losses in buildings (1986, p.751-760, eng) 41-1388
- Hartkopf, V.**  
Overall building enclosure evaluation in cold climates: a generic methodology for field measurement (1986, p.510-524, eng) 41-1385
- Hartmann, W.K.**  
Outer solar system materials: ices and color systematics (1985, p.169-181, eng) 41-1704
- Harvey, M.J.**  
Further studies on the assessment of marine radars for the detection of icebergs (1986, 82p., eng) 41-272  
Radar digitization, conversion and analysis of an ice hazard detection/collision avoidance system (1984, 17p., eng) 41-605
- Harwood, D.M.**  
Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet (1986, 592p., eng) 41-4280  
Do diatoms beneath the Greenland Ice Sheet indicate interglacials warmer than present (1986, p.304-308, eng) 41-2688
- Hasinen, E.**  
Major inorganic ions in the North Pole snow samples (1987, p.8-13, eng) 41-3369
- Hashimoto, T.**  
Hydraulic conveying of snow. 9. Development of techniques for high snow concentration (1987, p.59-66, jpn) 41-4320
- Hassab, M.A.**  
Formation and melting of a vertical ice slab in an enclosure (1987, p.167-177, eng) 41-2882
- Hastenrath, S.**  
Continued decrease of ice-flow velocity at Lewis Glacier, Mount Kenya, East Africa (1987, p.79-82, eng) 41-3600
- Hattori, K.**  
Steel plates for offshore structures used in icy seas (1984, p.35-52, eng) 41-1192
- Hattori, M.**  
Study of the melting process in ice-air composite materials (in the case where a temperature gradient exists in porous materials) (1986, p.2138-2144, eng) 41-532
- Haugen, J.E.**  
Numerical simulations with an idealized model (1986, p.151-160, eng) 41-1803
- Hauk, E.**  
Avalanche and meteorological summaries for Austria, winter 1984/85 and 1985/86 (1986, 90p., ger) 41-2492
- Haupt, A.C.**  
Proceedings (1986, 210p., eng) 41-966
- Hawkins, J.D.**  
NORDA Arctic data collection, processing, and interpretation capabilities (1985, 21p., eng) 41-243
- Hawkins, M.**  
Concrete durability in bridges (1987, p.397-421, eng) 41-3698
- Hawksworth, D.L.**  
Lichenicolous ascomycetes from Bouvetøya (1986, p.57-60, eng) 41-920
- Haworth, L.A.**  
Direct measurement of lichen growth in the central Brooks Range, Alaska, U.S.A., and its application to lichenometric dating (1986, p.289-296, eng) 41-1177
- Hay and Company Consultants, Inc.**  
Motion and impact of icebergs: development of a model to predict ice mass motions in the vicinity of an offshore structure (1986, 133p., eng) 41-3166
- Hayhoe, G.F.**  
Application of hot sand for winter ice control—laboratory phase (1984, 33p. + append., eng) 41-4073
- Haykin, S.**  
Detection of sea-ice features using K(a)-band radar (1985, p.499-500, eng) 41-1409
- Haymet, A.D.J.**  
Freezing (1987, p.1076-1080, eng) 41-3409  
Freezing and interfaces: density functional theories in two and three dimensions (1986, p.1-32, eng) 41-2810
- Haynes, F.D.**  
Effect of oscillatory loads on the bearing capacity of floating ice covers (1987, p.219-224, eng) 41-3032  
Heat transfer characteristics of a commercial thermosyphon with an inclined evaporator section (1987, p.79-84, eng) 41-2405  
Ice forces on bridge piers (1986, p.83-101, eng) 41-645
- Heard, H.C.**  
Rheologies of H<sub>2</sub>O ices (I), II, and III at high pressures: a progress report (1985, p.89-107, eng) 41-1699
- Heggli, M.**  
Supercooled liquid water and ice crystal distributions in winter storms of the central Sierra Nevada, 1978-79 and 1979-80 (1982, p.469-472, eng) 41-59
- Heiberg, A.**  
Deployment and operation of the ice stations for the FRAM program (1985, p.429-432, eng) 41-222
- Heidemann, T.**  
Arctic logistics and supporting services (1986, 16p., eng) 41-2283  
Operational experience with the new-type Baltic icebreaker "Otso" (1986, p.1039-1060, eng) 41-1145
- Heim, D.**  
Genesis of the push moraine at Kötluökull, Iceland: a commentary (1985, p.127-132, eng) 41-4131
- Hein, M.A.**  
Design methods for gas/condensate pipelines in cold environments (1986, p.143-151, eng) 41-79
- Hemleben, C.**  
Biogenic and mineral inclusions in a green iceberg from the Weddell Sea, Antarctica (1987, p.31-33, eng) 41-1975
- Hendershot, W.H.**  
Speciation of aluminum in different compartments of a drainage basin during snowmelt (1985, p.58-68, eng) 41-1485  
Temporal variation in aluminum speciation and concentration during snowmelt (1986, p.231-237, eng) 41-2620
- Henderson, S.J.**  
Melting temperature of ice at positive and negative pressures (1987, p.3069-3072, eng) 41-4126
- Henderson-Sellers, A.**  
Illustration of the influence of shadowing on high latitude information derived from satellite imagery (1986, p.1359-1365, eng) 41-2140
- Henderson, T.J.**  
Supercooled liquid water concentrations in winter orographic clouds from ground-based ice accretion measurements (1984, p.19-24, eng) 41-4370
- Hendricks, P.J.**  
Comments on *A heat balance for the Bering Sea ice edge* (1986, p.2205-2208, eng) 41-2843
- Heng, F.J.**  
Chemistry of deicing roads: breaking the bond between ice and road (1987, p.15-26, eng) 41-2068
- Henry, J.G.**  
Microbial aspects of the Inuvik sewage lagoon (1986, p.117-128, eng) 41-349
- Herman, G.**  
Sputtering of water ice at 30-140 K by 0.5-6.0 keV H(+) and Ne(+) ions (1985, p.287-299, eng) 41-1708
- Herman, G.F.**  
Arctic stratus clouds (1986, p.465-488, eng) 41-2992  
Atmospheric modelling and air-sea-ice interaction (1986, p.713-754, eng) 41-2997
- Hermanson, M.H.**  
Ice and sediment factors in the selection of Inuit water supplies from lentic sources (1986, 222p., eng) 41-2615
- Heron, R.**  
Breakup of small rivers in the Subarctic (1987, p.784-795, eng) 41-4081  
Effects of forests on wetland runoff during spring (1987, p.297-307, eng) 41-4319
- Herpers, U.**  
Determination of the spallogenic radionuclides Al-26 and Mn-53 in antarctic meteorites with respect to cosmic ray exposure and terrestrial ages (1987, p.191-195, eng) 41-4608
- Herrmann, R.**  
Behavior of hydrophobic, organic micropollutants in different karst water systems 1: transport of micropollutants and contaminant balances during the melting of snow (1987, p.79-95, eng) 41-3965  
Behavior of hydrophobic, organic micropollutants in different karst water systems 2: filtration capacity of karst systems and pollutant sinks (1987, p.97-109, eng) 41-3966  
Tracing faecal pollution by coprostanol and intestinal bacteria in an ice-covered Finnish lake loaded with both industrial and domestic sewage (1986, p.131-149, eng) 41-2477
- Herrod, L.D.B.**  
Geophysical fieldwork on the Ronne Ice Shelf, Antarctica (1986, p.9-14, eng) 41-1786
- Herterich, K.**  
On the flow within the transition zone between ice sheet and ice shelf (1987, p.185-202, eng) 41-3281
- Hester, L.H.**  
Long-range prediction of iceberg severity in the Labrador Sea (1986, p.355-385, eng) 41-155
- Hewitt, K.J.**  
Geotechnical design for an arctic mobile offshore drilling unit (1986, p.956-979, eng) 41-3170
- Hewlett, C.**  
Caisson drilling and completion system (1986, p.459-468, eng) 41-361
- Heymsfield, A.J.**  
Case study of a hailstorm in Colorado: graupel and hail production mechanisms (1982, p.453-456, eng) 41-56  
Examination of double-plate ice crystals and the initiation of precipitation in continental cumulus clouds (1987, p.1331-1349, eng) 41-4424  
Ice particle evolution in the anvil of a severe thunderstorm during CCOPE (1986, p.2463-2478, eng) 41-4052  
Improved approach to calculating terminal velocities of plate-like crystals and graupel (1987, p.1088-1099, eng) 41-3853  
Initiation mechanisms and rates of development of graupel particles and hailstones in High Plains storms: a numerical evaluation (1982, p.434-437, eng) 41-51  
Measurement and interpretation of hailstone density and terminal velocity (1982, p.442-445, eng) 41-53
- Hibler, W.D., III**  
Diagnostic ice-ocean model (1987, p.987-1015, eng) 41-4208  
Ice dynamics (1986, p.577-640, eng) 41-2995  
Large-scale ice-ocean modeling (1986, p.165-184, eng) 41-148  
Mesoscale sea ice deformation in the East Greenland marginal ice zone (1987, p.7060-7070, eng) 41-4261

- On estimating ice stress from MIZEX 83 ice deformation and current measurements [1986, p.17-19, eng] 41-3055
- Role of floe collisions in sea ice rheology [1987, p.7085-7096, eng] 41-4263
- Variability of Arctic sea ice drafts [1986, p.237-256, eng] 41-2662
- Hicks, R.G.**
- Evaluation of stripping problems in Oregon [1985, p.22-48, eng] 41-3333
- Use of rubber-modified asphalt pavements in cold regions [1987, p.541-574, eng] 41-4036
- Hidinger, W.P.**
- Bituminous surface treatments in northern Canada [1987, p.735-772, eng] 41-4042
- Performance of bituminous surface treatments in northern Canada [1986, p.206-228, eng] 41-2205
- Hielscher, A.**
- Deployment and operation of the ice stations for the FRAM program [1985, p.429-432, eng] 41-222
- Higashimoto, M.**
- Non-metallic optical fiber cable for use under low temperature [1981, p.12(2-1)-12(2-4), eng] 41-660
- Higuchi, K.**
- Glaciological studies in Asiatic highland region during 1985-1986 [1987, p.1-10, eng] 41-3908
- Hiki, Y.**
- Ultrasonic attenuation and dislocation damping in crystals of ice [1986, p.3445-3461, eng] 41-2975
- Hill, B.**
- Preliminary measurements of terminal crack velocity in ice [1987, p.233-238, eng] 41-3034
- Hill, J.**
- Acceptance testing for granular materials—a materials engineers viewpoint [1981, p.33-38, eng] 41-2924
- Hill, J.M.**
- Integral formulations and bounds for two phase Stefan problems initially not at their fusion temperature [1986, p.201-228, eng] 41-2366
- Hills, A.**
- Subzero engineering [1986, p.52-56, eng] 41-4273
- Hills, T.S.**
- Sea-ice and the antarctic winter circulation: a numerical experiment [1986, p.953-969, eng] 41-1474
- Hiladorf, H.**
- Effect of curing and type of cement on the resistance of concrete to freezing in deicing salt solutions [1987, p.877-899, eng] 41-3711
- Hiladorf, H.K.**
- Effect of curing and type of cement on the resistance of concrete to frost and de-icing salt [1986, p.57-62, ger] 41-832
- Himeno, K.**
- Temperature distributions in asphalt pavements [1987, p.241-275, eng] 41-4025
- Hinchey, M.J.**
- Floating ice roads and runways: critical speed phenomena [1986, p.139-147, eng] 41-176
- Transport over floating ice sheets [1987, p.321-328, eng] 41-2439
- Hindman, E.E.**
- Characteristics of subcooled liquid clouds from mountaintop observations and measurements [1982, p.491-494, eng] 41-65
- Cloud riming regions for snow crystals that impact mountain tops in the Colorado Rockies [1984, p.67-70, eng] 41-4373
- Comparison of the trace constituent composition of unrimed and rimed snow crystals [1982, p.61-62, eng] 41-4
- Hinkel, K.M.**
- Palsa formation in North-Central Alaska [1986, 217p., eng] 41-2640
- Hinman, D.C.**
- Carbonated ice process and product [1983, 10 col., eng] 41-1768
- Hietikka, J.**
- Exhibition and demonstration of equipment [1986, p.78-81, eng] 41-2489
- Hirasawa, T.**
- Activities of the wintering party of the 25th Japanese Antarctic Research Expedition in 1984-1985 [1986, p.113-137, jpn] 41-980
- Hiro, S.**
- Automatic operation of a freeze-thawing and dewatering plant for sewage sludges [1981, p.599-604, eng] 41-873
- Hirsch, J.H.**
- Seeding potential of stratus and nimbostratus clouds: a PEP numerical experiment [1982, p.222-225, eng] 41-21
- Hjelmfelt, M.R.**
- Numerical simulation of the airflow over Lake Michigan for a major lake-affected snow event [1982, p.228-235, eng] 41-3377
- Hjelmstad, J.**
- Ocean wave phenomena observed with an adaptive multifrequency radar system [1986, p.311-327, eng] 41-1813
- Hjort, J.**
- Yellow spots on the ice of Lake Mälaren [1982, p.226-230, swe] 41-2857
- Ho, C.J.**
- Numerical simulation of melting of ice around a horizontal cylinder [1986, p.1359-1369, eng] 41-564
- Outward melting in a cylindrical annulus [1986, p.240-245, eng] 41-850
- Hobbs, P.V.**
- Evidence for the production of ice particles in clouds due to aircraft penetrations [1982, p.107-110, eng] 41-8
- Ice particles in marine and continental clouds [1984, p.71-72, eng] 41-4374
- Hoberstorfer, G.**
- Method of selective underground mining and stabilization of rock cavities [1983, 18 col., eng] 41-1773
- Hobson, G.D.**
- Logistics support for Arctic scientific camps and drifting ice stations [1986, p.462-472, eng] 41-2039
- Hoddinott, T.**
- Analysis of gravity platform foundations using F.E.M. with stochastic materials [1986, p.127-135, eng] 41-358
- Hodel, K.L.**
- Sagavanirktok River, North Slope Alaska: characterization of an Arctic stream [1986, 28p., eng] 41-1895
- Hodell, D.A.**
- Latest Miocene benthic delta O-18 changes, global ice volume, sea level and the 'Messinian salinity crisis' [1986, p.411-414, eng] 41-1174
- Hodge, S.M.**
- Ice sheet topography and internal characteristics from microwave and radar measurements [1986, p.237-255, eng] 41-3986
- Hodgins, D.O.**
- Field measurements of sediment transport on the Scotian shelf. Vol.2. Boundary layer measurements and sand transport prediction [1986, 114p. + append., eng] 41-3189
- Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program [1986, 195p., eng] 41-3030
- Hodgson, G.J.**
- Design of a repetitive-mapping network for ice scour: east coast [1986, p.287-292, eng] 41-3121
- Hodgson, T.P.**
- High speed borehole pressuremeter to measure the crushing strength of ice [1986, p.187-208, eng] 41-1592
- Hoff, G.**
- Durability of fiber reinforced concrete in a severe marine environment [1987, p.997-1041, eng] 41-3717
- Hoff, R.M.**
- Air chemistry observations in the Canadian Arctic [1986, p.97-107, eng] 41-348
- Hogan, A.W.**
- Aerosol exchange in the remote troposphere [1986, p.197-213, eng] 41-1751
- Aerosol transport processes in the Antarctic [1985, p.205-206, eng] 41-3324
- Chemical migration in mid latitude snow pack [1985, p.243-254, eng] 41-1500
- Is sleet a contact nucleation phenomenon [1985, p.290-294, eng] 41-1507
- Hohler, J.J.**
- Alaska: potential for giant fields [1986, p.131-142, eng] 41-2607
- Holseth, T.**
- Proceedings [1986, 210p., eng] 41-966
- Holmark, H.**
- Greenland ice-sheet margin—a mine of ice for paleo-environmental studies [1987, p.229-234, eng] 41-3794
- Holburn, J.G.**
- Evaluation and definition of the extent of superstructure icing as it may relate to ship safety and operations for the east coast of Canada [1986, 106p., eng] 41-3374
- Holler, P.**
- Avalanche and meteorological summaries for Austria, winter 1984/85 and 1985/86 [1986, 90p., ger] 41-2492
- Holliday, V.M.**
- Cold-induced losses in loose-sheath fiber-optic cables [1981, p.77-79, eng] 41-582
- Hollings, J.P.**
- Limit state probabilistic design of offshore Arctic pipelines [1987, p.115-123, eng] 41-4632
- Holmgren, B.**
- Climate and glaciation in Kong Karls Land, eastern Svalbard [1984, p.291-302, eng] 41-2007
- Holmlund, O.**
- Extrusion flow demonstrated by borehole deformation measurements over a riegel, Storglaciären, Sweden [1987, p.72-78, eng] 41-3599
- Holmlund, P.**
- Mikkaglaciären: bed topography and response to 20th century climate change [1986, p.291-302, eng] 41-3561
- Holroyd, E.W., III**
- Liquid water limitation to ice particle growth in Montana cumulus congestus clouds [1982, p.350-353, eng] 41-32
- Surface sampling of a snowstorm by a 2D-C probe with and without aspiration [1986, p.755-758, eng] 41-4544
- Holt, B.**
- Beaufort-Chukchi ice margin data from Seasat: ice motion [1987, p.7163-7172, eng] 41-4268
- Shuttle Imaging Radar B (SIR-B) Weddell Sea ice observations: a comparison of SIR-B and scanning multichannel microwave radiometer ice concentrations [1987, p.7173-7179, eng] 41-4269
- Holwerda, S.J.**
- Deicing system [1980, 12 col. + 3 sheets, eng] 41-2371
- Homma, H.**
- Study on the improvement of weld properties for ultra-heavy steel plate (HT-50) for offshore structures in frigid regions [1984, p.53-59, eng] 41-1193
- Honda, T.**
- Automatic operation of a freeze-thawing and dewatering plant for sewage sludges [1981, p.599-604, eng] 41-873
- Hook, C.**
- Glacier training [1986, p.11, eng] 41-1842
- Hooke, R.L.**
- Borehole deformation experiments, Barnes Ice Cap, Canada [1986, p.261-276, eng] 41-1293
- Extrusion flow demonstrated by borehole deformation measurements over a riegel, Storglaciären, Sweden [1987, p.72-78, eng] 41-3599
- Water storage in Storglaciären, Kebnekaise, Sweden [1986, p.279-290, eng] 41-3560
- Hooton, R.**
- Evaluation and prediction of concrete durability—Ontario Hydro's experience [1987, p.1121-1154, eng] 41-3721
- Hoover, J.M.**
- Performance of soil-aggregate-fabric systems in frost-susceptible roads, Linn County, Iowa [1981, p.6-14, eng] 41-1038
- Hoover, M.**
- Classification of sea ice types with single-band (33.6 GHz) airborne passive microwave imagery [1986, p.10,661-10,695, eng] 41-1008
- Horiguchi, K.**
- Osmotic model for soil freezing [1987, p.13-22, eng] 41-4212
- Solution model for soil freezing [1986, p.69-82, jpn] 41-3881
- Horii, K.**
- Ice as capacitor dielectric [1985, p.539-542, eng] 41-3349
- Horluchi, S.**
- Sub-Arctic ground improvement using the deep mixing method [1986, p.211-221, eng] 41-1097
- Horn, R.D.**
- Kinetics of ice crystal formation in "dynamic" cloud conditions [1984, p.189-190, eng] 41-4389
- Hornain, H.**
- Durability of an arctic concrete [1987, p.919-933, eng] 41-3713
- Hoshiai, T.**
- Sea ice meiofauna at Syowa Station, Antarctica [1986, p.118-124, eng] 41-3634
- Hoshiba, S.**
- Conversion of a low-speed wind tunnel to a snowdrift wind tunnel [1986, p.291-294, eng] 41-1296
- Hotzel, I.S.**
- Ice management on the Grand Banks [1985, p.416-419, eng] 41-220
- Hou, R.**
- Modeling of BOD-DO dynamics in an ice-covered river in northern China [1987, p.247-251, eng] 41-3967
- Houghton, J.P.**
- Fate and effects of drilling fluids and cuttings discharges in lower Cook Inlet, Alaska, and on Georges Bank [1984, p.1-388, eng] 41-1782
- Houmb, O.G.**
- Environmental conditions under polar lows [1986, p.343-357, eng] 41-1815
- Proceedings of the International Conference on Polar Lows, 1986 [1986, 364p., eng] 41-1795
- Housen, K.R.**
- Low-velocity impact penetration of an ice layer over water [1986, p.439-449, eng] 41-2669
- Houssais, M.N.**
- Coupled ice-mixed layer model for the Greenland Sea [1986, p.225-260, eng] 41-150
- Howard, L.M.**
- Icebergs: a bibliography relevant to eastern Canadian waters [1986, 277p., eng] 41-271
- Howard, M.W.**
- Effect of sub-surface irregularities on the strength of multi-year ice [1987, p.225-238, eng] 41-2426
- General viewpoints on hydrocarbon developments in northern regions [1986, p.317-323, eng] 41-2282
- Howard-Williams, C.**
- Alph River ecosystem: a major freshwater environment in southern Victoria [1986, p.21-33, eng] 41-2871
- Antarctic stream ecosystems: variability in environmental properties and algal community structure [1986, p.511-544, eng] 41-1558
- Sources of organic nitrogen, phosphorus and carbon in antarctic streams [1986, p.215-225, eng] 41-613
- Howarth, P.J.**
- Use of LANDSAT digital data in glacier inventory [1986, p.90-92, eng] 41-745

- Howe, K.E.**  
Interaction of gravel fills, surface drainage, and culverts with permafrost terrain [1984, 35p., eng] 41-4072
- Howe, R.**  
Configurational entropy of partially ordered ice [1987, p.6443-6445, eng] 41-4180
- Howell, R.R.**  
Sulfur dioxide ice on Io [1985, p.805-815, eng] 41-1739
- Hozle, S.**  
Tensile strength of ice with preexisting cracks [1986, 7p., eng] 41-2132
- Hromadka, T.V., II**  
Computing the steady state freezing front location in two-dimensional algid soils [1987, p.91-95, eng] 41-2407  
CVBEM modeling of tracking two-dimensional freezing fronts in algid soil [1987, p.109-112, eng] 41-2410  
Isothermal phase change model for freezing and thawing soils 1: development [1986, p.113-117, eng] 41-4134  
Isothermal phase change model for freezing and thawing soils 2: model [1986, p.118-123, eng] 41-4135  
Mathematical model of frost heave in freezing soils [1980, 178p., eng] 41-899  
Nodal domain integration model of two-dimensional heat and soil-water flow coupled by soil-water phase change [1987, 124p., eng] 41-1568
- Hrubec, J.D.**  
Feasibility tests of autonomous antenna deployment through ice [1986, p.461-471, eng] 41-2671
- Hsiao, S.I.C.**  
Sedimentation in Arctic Canada: species composition and biomass of phytoplankton contributed to the marine sediments in Frobisher Bay [1987, p.245-251, eng] 41-3685
- Hsu, F.H.**  
Ice island construction [1983, 8 col., eng] 41-1777
- Hsu, H.-M.**  
Mesoscale lake-effect snowstorms in the vicinity of Lake Michigan: linear theory and numerical simulations [1987, p.1019-1040, eng] 41-3850
- Hu, Z.**  
Numerical model of stratiform cloud [1984, p.617-619, eng] 41-4410
- Huang, J.S.**  
Effect of natural convection on ice crystal growth rates in salt solutions [1985, p.747-752, eng] 41-2333
- Huang, M.**  
Outline of avalanches in China [1986, p.11-18, eng] 41-1300  
Research on the tunnel excavated in Urumqi Glacier No.1, Tianshan Glaciological Station, China [1987, p.99-104, eng] 41-3602
- Huang, S.L.**  
Laboratory creep tests of frozen gravels [1986, p.101-104, eng] 41-1309  
Stability study of CRREL permafrost tunnel [1986, p.777-790, eng] 41-230  
Temperature and time effects on the closure of a gravel room in permafrost [1985, p.53-65, eng] 41-2743
- Huang, Z.**  
Introduction of anti-heave bridge with anchor striped foundation [1986, p.267-270, chi] 41-1428
- Huber, B.A.**  
Spring distributions of density, nutrients, and phytoplankton biomass in the ice edge zone of the Weddell-Scotia Sea [1987, p.7181-7190, eng] 41-4270
- Huber, N.P.**  
Friction of solids on ice [1986, 4p., eng] 41-2134
- Hudec, P.**  
Deterioration of aggregates—the underlying causes [1987, p.1325-1342, eng] 41-3729
- Hudec, P.P.**  
Microclimate of concrete barrier walls: temperature, moisture and salt content [1986, p.615-623, eng] 41-1997
- Huff, F.A.**  
Potential urban effects on precipitation in the winter and transition seasons at St. Louis, Missouri [1986, p.1887-1907, eng] 41-4056
- Hughes, O.L.**  
Pedological investigations of Pleistocene glacial drift surfaces in the central Yukon [1986, p.29-37, eng] 41-2704
- Hughes, P.**  
Modern sediments of the Terra Nova Bay polynya, Ross Sea, Antarctica [1985, p.107-108, eng] 41-2949
- Hughes, R.**  
Grading and frost heave [1981, p.51-56, eng] 41-2926
- Hughes, T.J.**  
Amundsen Sea sediment coring [1985, p.79-81, eng] 41-2635  
Deluge II and the continent of doom: rising sea level and collapsing antarctic ice [1987, p.89-100, eng] 41-4099  
Global ice-sheet system interlocked by sea level [1986, p.3-26, eng] 41-611  
Potential influence of floating ice shelves on the climate of an ice age [1986, p.509-513, eng] 41-2801
- Hui, D.**  
Viscoelastic response of floating ice plates under distributed or concentrated loads [1986, p.135-143, eng] 41-1212
- Humlum, O.**  
Genesis of the push moraine at Kötlujökull, Iceland: a commentary [1985, p.127-132, eng] 41-4131  
Glaciation level in West Greenland [1985, p.311-319, eng] 41-1250
- Hummel, A.**  
Effect of water content on the dark and radiation induced microwave conductivity of frozen gelatin gels [1987, p.51-56, eng] 41-2807
- Humphrey, N.**  
Discharges of turbid water during mini-surges of Variegated Glacier, Alaska, U.S.A. [1986, p.195-207, eng] 41-679
- Huneault, P.**  
Resistance of frozen ground to steady cone or pile penetration [1987, p.125-132, eng] 41-2413  
Use of the borehole dilatometer stress-relaxation test for determining the creep properties of ice [1987, p.253-259, eng] 41-2429
- Hunaldi, F.**  
Device for determining frost depth and density [1983, 4 col., eng] 41-1765
- Hung, S.**  
Multi-year experience of remote sensing of ice thickness on the St. Lawrence River [1984, p.86-100, eng] 41-1950
- Hunkins, K.**  
Atmospheric boundary layer modification in the marginal ice zone [1986, p.13,033-13,044, eng] 41-1861
- Hunkins, K.L.**  
Current regimes across the East Greenland Polar Front at 78 deg 40' north latitude during summer 1984 [1987, p.6741-6753, eng] 41-4234
- Hunter, H.E.**  
Classification of ambiguous ice particle shadowgraphs by consensus [1985, p.675-679, eng] 41-3218
- Hunter, R.E.**  
Flume studies and field observations of the interaction of frazil ice and anchor ice with sediment [1986, 48p., eng] 41-1210
- Huokuna, M.**  
Field data for the numerical modeling of winter conditions and computerized testing of field data [1986, p.305-317, eng] 41-539
- Hurlbut, S.E.**  
Analysis of potential slope instability due to wave loading on the Nova Scotian shelf [1986, p.980-999, eng] 41-3171
- Hutter, K.**  
Elements of a computational theory for glaciers [1986, p.132-150, eng] 41-2896  
New theory and numerical method for solving plane steady chute flows of a granular material. Applications to flow avalanches [1986, 105p., eng] 41-3337  
Numerical study of plane ice-sheet flow [1986, p.139-160, eng] 41-674  
Plane steady shear flow of a cohesionless granular material down an inclined plane: a model for flow avalanches, part 1: theory [1986, p.87-112, eng] 41-3300  
Plane steady shear flow of a cohesionless granular material down an inclined plane. A model for flow avalanches part 2: numerical results [1987, p.239-261, eng] 41-4205
- Hutton, H.**  
Design and operation of the Arctic Ivik, a new Arctic class II vessel for the Beaufort Sea [1986, p.244-256, eng] 41-2030
- Hyde, W.T.**  
Sensitivity experiments with a model of the ice age cycle: the response to Milankovitch forcing [1987, p.1351-1374, eng] 41-4053
- Hyvärinen, T.**  
Infrared measurement of free-water content and grain size of snow [1987, p.342-348, eng] 41-3780
- Hyvärinen, V.**  
Some practical aspects of graphical ice reduction [1986, p.25-29, eng] 41-534
- Iagin, V.P.**  
Design and construction of the sole part of the Kureyskaya channel dam [1986, p.27-31, rus] 41-2866  
Lay-out and structural design of basic structures of the Kureyskaya hydroelectric plant [1986, p.11-17, rus] 41-2863  
Passing construction wastes and spanning the river at the Kureyskaya station site [1986, p.23-27, rus] 41-2865  
Using dry, low-cement, rolled concrete mix for construction of the Kureyskaya hydroelectric power plant [1986, p.31-35, rus] 41-2867
- IAkovenko, I.U.G.**  
Studying the service life of forest winter roads on the Arkhangelsk Lumber Industry lands [1987, p.40-45, rus] 41-4172
- IAkovlev, A.V.**  
Recommendations for the design and construction of geocryogenic coolers [1986, 66p., rus] 41-3329
- IAkovlev, V.M.**  
Some problems of building ice foundations in freezing seas [1986, p.162-166, rus] 41-2171  
Technical means for thermal drilling and cutting of ice [1986, p.37-39, rus] 41-2151
- IAkovlev, V.N.**  
New data on the position of the Bellingshausen Ice Shelf [1986, p.227-231, eng] 41-3202
- IAkunin, A.E.**  
Determining the elasticity modulus and viscosity coefficient of ice cover from investigation data obtained under semi-natural conditions [1986, p.124-128, rus] 41-455
- IAkunin, L.P.**  
Amount of ice and heat required for its melting in the Far-Eastern seas of the USSR [1986, p.93-96, rus] 41-4201
- IAkushenkov, A.A.**  
Automated navigational aids for icebreaking cargo ships [1987, p.20-22, rus] 41-2785  
Navigation and ship control. Collection of works [1986, 137p., rus] 41-3383
- IAkushev, M.V.**  
Safety measures for electric-power objects of the South Yakutia Task Economic Complex [1985, p.91-99, rus] 41-1926
- IANbykh, N.N.**  
Frost resistance of concrete with admixtures when frozen at older age [1986, p.36-37, rus] 41-2789  
Studies of pore structure of concretes with air-entrainment admixtures [1987, p.34-35, rus] 41-3614
- IANchenko, O.M.**  
Experience and prospects of using self-contained steam-liquid cooling devices in construction on permafrost [1983, p.3-12, rus] 41-4471
- IANitskii, P.A.**  
Self-similar solution of a problem of freezing of finely dispersed soils with allowance for moisture migration in thawed and frozen zones [1986, p.264-270, eng] 41-2208  
Solution of the self-simulating problem of heat and moisture transfer during freezing of disperse soils [1987, p.1338-1344, eng] 41-4163  
Studying heat and mass transfer in frozen ground around thermopiles [1986, p.1127-1130, rus] 41-2537  
Studying the kinetics of changes in phase composition of moisture in freezing disperse rocks [1986, p.52-59, rus] 41-3395
- Iarkin, A.A.**  
Studies of frozen ground excavation equipment [1978, 87p., rus] 41-1310
- Iarkin, I.G.**  
Hard coatings for diminishing frost heaving and foundation deterioration [1985, p.49-51, rus] 41-300
- Iarmosh, V.G.**  
Field studies of the Neryungri earth dam [1986, p.18-20, rus] 41-1402
- IArosh, V.I.**  
Working conditions of power transmissions of ice-navigating ships [1986, p.3-8, rus] 41-3386
- IASinskii, I.U.A.**  
Conditions of hydrate formation in drowned oil-gas wells [1986, p.21-23, rus] 41-3772
- IASinskii, S.V.**  
Numerical expression of runoff formation models for simple catchment areas, based on remote sensing data [1986, p.30-36, rus] 41-2734
- IAstrebov, E.K.**  
Lowering piles into holes drilled with fire-jet drills in permafrost (the case of northern Tyumen' region) [1986, p.8-10, rus] 41-4615
- IAzykov, L.N.**  
Mapping of territories with unstable snow covers [1986, p.82-84, rus] 41-1687
- Ice detection and road weather information systems: a state of the art report**  
Ice detection and road weather information systems: a state of the art report [1985, 127p., eng] 41-1414
- Ice engineering laboratory, Nippon Kohan K.K.**  
Ice engineering laboratory, Nippon Kohan K.K. [1986, p.113-115, jpn] 41-444
- Ice prediction package cuts costs on Cheshire's gritting operation**  
Ice prediction package cuts costs on Cheshire's gritting operation [1987, p.20-22, eng] 41-4331
- Ice thickness data for selected Canadian stations, freeze-up 1972-break-up 1973; freeze-up 1973-break-up 1974; freeze-up 1974-break-up 1975; and freeze-up 1975-break-up 1976**  
Ice thickness data for selected Canadian stations, freeze-up 1972-break-up 1973; freeze-up 1973-break-up 1974; freeze-up 1974-break-up 1975; and freeze-up 1975-break-up 1976 [1976, 4 pieces, eng] 41-4595
- Ice thickness data, winter 1979-1980**  
Ice thickness data, winter 1979-1980 [1987, 43p., eng] 41-3253
- Icebreakers and icebreaking. 1974-January 1984 (Citations from Oceanic Abstracts)**  
Icebreakers and icebreaking. 1974-January 1984 (Citations from Oceanic Abstracts) [1984, 129p., eng] 41-3230
- Iddings, D.W.**  
Ice penetrating buoy tests [1986, p.451-460, eng] 41-2670  
Non-resonant acoustic projector (NRAP) for low frequency studies [1985, p.454-459, eng] 41-227



- Idel'son, V.B.**  
Thermal regime and the stress-strain state of a concrete dam, built of rolled concrete, under severe climatic conditions [1987, p.35-37, rus] 41-3268
- Ievlev, M.V.**  
Double air and hot-air curtains in entrances to industrial buildings [1986, p.26-32, rus] 41-2917
- Ignatenko, I.V.**  
Geophysics and man-induced changes of landscapes in the Chukotskiy Peninsula [1987, 271p., rus] 41-3247
- Ignatov, A.A.**  
Physico-chemical processes of mining. Mathematical models of leaching ores and thawing frozen rocks [1986, 97p., rus] 41-3015
- Igoshin, V.A.**  
Contact interactions of materials with ice and snow covers [1984, 24p., rus] 41-4503  
Methods of studying contact interactions of materials with ice and snow [1984, p.3-7, rus] 41-4504
- Iida, H.**  
Characteristics of snowcover and formation process of dirt layer in the accumulation area of Yala Glacier, Langtang Himal, Nepal [1987, p.55-62, eng] 41-3916
- Iijima, T.**  
Investigation on the straight asphalt properties of Japan [1987, p.1-36, eng] 41-4020
- Iijima, Y.**  
Under-snow radar using multifrequency holography [1986, p.111-118, eng] 41-853
- Iizuka, K.**  
Measurement of saline ice thickness using a step frequency radar [1986, 20p., eng] 41-4511
- Ikarashi, T.**  
Model of snow glide acceleration to full depth avalanche release [1986, p.169-180, jpn] 41-3008
- Ikedo, T.**  
Improvement of asphalt pavement durability by surface treatment of coarse aggregates [1987, p.619-636, eng] 41-4038
- Il'in, A.K.**  
Thermal energy of polar seas [1987, p.96-112, rus] 41-4146
- Il'in, M.M.**  
Solar heating systems for low-rise buildings [1984, p.7-9, rus] 41-1830
- Il'ina, E.A.**  
Experience in compiling and using complex engineering glaciological maps [1986, p.213-219, rus] 41-137
- Il'inski, V.V.**  
Basic methods and principal results of studying the role of physical, chemical and biologic factors in the cleaning of Arctic waters and ice from petroleum hydrocarbons [1986, p.171-173, rus] 41-2390
- Illingworth, A.J.**  
Dual polarisation radar measurements of the evolution of ice in clouds [1984, p.787-790, eng] 41-4418
- Imai, M.**  
Qualities of high-strength lightweight concrete used for construction of Arctic offshore platform [1987, p.7-15, eng] 41-2922
- Imura, H.**  
Heat transfer characteristics of a latent heat storage unit with a finned tube, Pts. 1 and 2 [1986, p.2978-2992, eng] 41-2110
- Inaba, H.**  
Freezing fracture of curved water pipes (1st report, freezing behavior of 180 deg curved pipes) [1986, p.2151-2155, eng] 41-531  
Melting of horizontal ice layer from above by combined effect of temperature and concentration of aqua-solvent [1987, p.227-232, eng] 41-3963
- Inderbitzen, A.L.**  
R/V *Polar Duke*—a new vessel for antarctic research support [1985, p.437-440, eng] 41-224
- Ingraham, K.P.**  
Bibliography of alpine and subalpine areas of the Front Range, Colorado [1986, 114p., eng] 41-697
- Innes, J.L.**  
(14C) dating and paleoenvironment of the historic 'Little Ice Age' glacier advance of Nigardsbreen, Southwest Norway [1986, p.369-375, eng] 41-2472  
Dating exposed rock surfaces in the Arctic by lichenometry: the problem of thallus circularity and its effect on measurement errors [1986, p.253-259, eng] 41-1869  
Relative dating of Neoglacial moraine ridges in North Norway [1984, p.53-63, eng] 41-625
- Inoue, J.**  
Characteristics of precipitation and vertical structure of air temperature in the northern Patagonia [1987, p.15-23, eng] 41-3823  
Cooling of water and the overlying air by melting ice at Lagoon San Rafael in the northern Patagonia [1987, p.97-102, eng] 41-3833  
Dendrochronologies of San Rafael and Soler areas, Patagonia [1987, p.125-132, eng] 41-3837  
Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield [1987, p.133-140, eng] 41-3838  
Summer climate of the Northern Patagonia Icefield [1987, p.7-14, eng] 41-3822
- Water depth of Lagoon San Rafael, Patagonia [1987, p.103-105, eng] 41-3834**
- Wind regime of San Rafael Glacier, Patagonia [1987, p.25-30, eng] 41-3824**
- Inoue, M.**  
Mechanical properties of antarctic sea ice (II) [1987, p.239-244, eng] 41-2427
- Inozemtsev, V.K.**  
Effect of dynamic action on compressibility of thawing sands [1987, p.235-240, eng] 41-4165
- Institute of Northern Engineering, 1985-1986 report**  
Institute of Northern Engineering, 1985-1986 report [1986, 48p., eng] 41-364
- International Association of Hydraulic Sciences.**  
International Commission on Snow and Ice  
Avalanche atlas: illustrated international avalanche classification [1981, 265p., eng] 41-1158
- International Cloud Physics Conference, 9th Tallin, Aug. 21-28, 1984**  
Proceedings [1984, 3 vols. (835p.), eng] 41-4369
- International Conference on Arctic Water Pollution Research: Applications of Science and Technology, Yellowknife, N.W.T., 1985**  
Arctic water pollution research: applications of science and technology [1986, 193p., eng] 41-339
- International Conference on Behaviour of Offshore Structures, (BOSS '85), 4th, Delft, The Netherlands, July 1-5, 1985**  
Behaviour of offshore structures; Proceedings [1985, 1012p., eng] 41-665
- International Conference on Fly Ash, Silica Fume, Slag, and Natural Pozzolans in Concrete, 2nd, Madrid, Spain, April 21-25, 1986**  
Fly ash, silica fume, slag, and natural pozzolans in concrete; Proceedings [1986, 1609p. (2 vols.), eng] 41-1152
- International Conference on Ice Technology, 1st, Cambridge, MA, June 1986**  
Ice technology: proceedings of the 1st International conference [1986, 594p., eng] 41-1578
- International Conference on Polar Laws, Oslo, Norway, May 20-23, 1986**  
Proceedings of the International Conference on Polar Laws, 1986 [1986, 364p., eng] 41-1795
- International Heat Transfer Conference, 6th, Toronto, Canada, Aug. 7-11, 1978**  
[Proceedings] [1978, Vols. 1, 2 and 3, eng] 41-463
- International Heat Transfer Conference, 8th, San Francisco, CA, Aug. 17-22, 1986**  
Heat transfer, 1986; proceedings [1986, 6 vols. + 1 vol. of abstracts, eng] 41-3288
- International Northern Research Basins Symposium/Workshop, Houghton, MI, Jan. 26-30, 1986**  
Field measurements under winter conditions [1986, 323p., eng] 41-533
- International Offshore and Navigation Conference and Exhibition, Helsinki, Finland, Oct. 27-30, 1986.**  
[Proceedings] [1986, 3 vols. + Suppl., eng] 41-1087
- International Offshore Mechanics and Arctic Engineering Symposium, 6th, Houston, Texas, Mar. 1-6, 1987**  
Proceedings [1987, 4 vols., eng] 41-2394
- International Polar Transportation Conference (IPTC 86), Vancouver, Canada, May 4-8, 1986**  
Proceedings [1986, 2 vols. (877p.), eng] 41-2020
- International Symposium and Exhibit on Offshore Mechanics and Arctic Engineering, 6th, Houston, TX, Mar. 1-6, 1987**  
Advances in ice mechanics—1987 [1987, 49p., eng] 41-2929  
Offshore and Arctic pipelines—1987 [1987, 199p., eng] 41-4628
- International Symposium on Remote Sensing of Environment, 18th, Paris, Oct. 1-5, 1984**  
Summaries [1985, 251p., eng] 41-3962
- International Symposium on Remote Sensing of Environment, 19th, Ann Arbor, MI, Oct. 21-25, 1985**  
Proceedings [1986, 1101p. (2 vols.), eng] 41-3985
- International Workshop on Hydraulic Effects at the Glacier Bed and Related Phenomena, Interlaken, Switzerland, Sep. 16-19, 1985**  
Hydraulic effects at the glacier bed and related phenomena [1986, 148p., eng] 41-961
- International Workshop on Hydrologic Applications of Space Technology, Cocoa Beach, FL, Aug. 19-23, 1985**  
Hydrologic applications of space technology [1986, 488p., eng] 41-3894
- Inuzuka, M.**  
Adhesive layer for overlay with thin concrete blocks [1987, p.525-540, eng] 41-4035
- Ioffe, D.I.A.**  
Trafficability of snow cover by wheeled vehicles from experimental data [1986, p.146-153, rus] 41-2168
- Ionin, A.S.**  
Shelf: the relief, sediments and their formation [1987, 205p. (Pertinent p.53-80), rus] 41-3688
- Ionov, B.P.**  
Experimental study of maneuverability of icebreakers and ships in sea ice [1986, p.276-297, eng] 41-2279
- Ionova, V.B.**  
Methods of using measurements to correct model-based calculations of snow reserves in mountains [1986, p.27-36, rus] 41-545
- Ip, W.-H.**  
Condensation and agglomeration of cometary ice: the HDO/H<sub>2</sub>O ratio as tracer [1985, p.389-395, eng] 41-1713
- Irvine, K.N.**  
Spatial analysis of snow- and rain-generated highflows in southern Ontario [1987, p.140-149, eng] 41-4076
- Irwin, P.A.**  
Snowdrift models [1985, p.4-11, eng] 41-334
- Isaeva, L.L.**  
Quaternary glaciations of Central Siberia [1986, 121p., rus] 41-1906
- Ishida, Y.**  
Non-metallic optical fiber cable for use under low temperature [1981, p.12(2-1)-12(2-4), eng] 41-660  
Transmission loss of coated single-mode fiber at low temperatures [1980, p.4200-4205, eng] 41-264
- Ishihara, K.**  
Excess loss of single-mode jacketed optical fiber at low temperature [1983, p.2356-2362, eng] 41-486  
Transmission loss of coated single-mode fiber at low temperatures [1980, p.4200-4205, eng] 41-264
- Ishikawa, N.**  
Radiation measurements of snowy season in 1986 at Sapporo [1986, p.17-23, jpn] 41-3503
- Ishikawa, S.**  
Experimental decomposition of particulate organic matter collected under the fast ice in Lützow-Holm Bay, Antarctica, with special reference to the fate of carbon, nitrogen and phosphorus [1986, p.55-66, eng] 41-3632  
Oceanographic and marine biological data based on the routine observations near Syowa Station between Feb. 1984 and Jan. 1985 (JARE-25) [1987, 21p., eng] 41-3667  
Overwintering strategy of antarctic krill (*Euphausia superba* Dana) under the coastal fast ice off the Ongul Islands in Lützow-Holm Bay, Antarctica [1986, p.67-85, eng] 41-3633  
Snow algal blooms and their habitat conditions observed at Syowa Station, Antarctica [1986, p.191-197, eng] 41-3635
- Ishimiya, K.**  
Characteristics of ice formation in a curved channel containing flows. Part 1: Unsteadiness of initial solidification and heat transfer at water-ice interface [1987, p.294-301, eng] 41-3401
- Ishizawa, K.**  
Operating performance of the Antarctic icebreaker *Shirase* and highland traverse by snowvehicle [1986, p.563-578, eng] 41-2046
- Iskandar, I.K.**  
Corps of Engineers Land Treatment Research and Development program [1986, p.17-18, eng] 41-406  
Effect of freezing on the level of contaminants in uncontrolled hazardous waste sites. Part 1: literature review [1986, 33p., eng] 41-693  
Retention and release of metals by soil—evaluation of several models [1986, p.131-154, eng] 41-2138
- Iskoz, E.B.**  
Selection of architectural and structural types and technical-economic analyses of timber-transporting ships [1984, p.29-37, rus] 41-542
- Issangulov, K.I.**  
Main trends of the offshore oil and gas production structures—development for the freezing sea conditions [1986, p.160-166, eng] 41-2271
- Itagaki, K.**  
Friction of solids on ice [1986, 4p., eng] 41-2134  
Natural rotor icing on Mount Washington, New Hampshire [1986, 62p., eng] 41-3480
- Ito, H.**  
High-precision distance measurement with an unmanned moving target [1986, p.93-95, eng] 41-746  
Kinematics of marginal ice: MIZEX 83 [1986, p.7-16, eng] 41-3054  
Vane shear strength of snow (2)—Effects of the shape and the size of vane on the vane shear strength of snow [1986, p.133-140, jpn] 41-1217  
Yield curve of pack ice (1): physical meaning [1986, p.105-109, eng] 41-355  
Yield curve of pack ice (2): general shape [1986, p.111-117, eng] 41-356
- Ito, T.**  
Balloon observation of aerosols in the antarctic troposphere and stratosphere [1986, p.214-222, eng] 41-1752
- Itoh, K.**  
Development of new advanced materials for sub-arctic and arctic offshore structures [1986, p.833-968, eng] 41-1135  
Development of steel plates produced by thermo-mechanically controlled process for Arctic offshore structures with superior Haz toughness and weldability [1986, p.807-832, eng] 41-1134  
Local corrosion resistance steels with high strength, better low-temperature notch toughness and weldability [1986, p.869-896, eng] 41-1136

- Itoh, M.**  
Investigation on the straight asphalt properties of Japan [1987, p.1-36, eng] 41-4020  
Sub-Arctic ground improvement using the deep mixing method [1986, p.211-221, eng] 41-1097
- Iudov, A.M.**  
Numerical simulation of the artificial precipitation zone induced by seeding stratiform clouds with nucleating agents [1986, p.63-76, rus] 41-1902
- Iurganov, M.M.**  
Water accumulation and frost heave in seasonally freezing ground [1985, p.82-83, rus] 41-315
- Iurko, A.A.**  
Schemes for blast-excavation of frozen ground with slit- and borehole charges [1987, p.18-19, rus] 41-4625
- Iurkov, E.N.**  
Comparative specification of engineering thermometers for low temperatures [1986, p.259-262, eng] 41-1407
- Iurov, I.U.L.**  
Calculating the mass of chemically altered rocks of probable age and chemical denudation rate, during the formation of primitively-cryogenic weathering crust (Khibiny Mountains taken as an example) [1986, p.119-121, rus] 41-1002
- Iurovskii, M.G.**  
Temperature regime of rocks surrounding underground excavations of the Kolyma Hydroelectric Power Plant [1985, p.26-29, rus] 41-429
- Iurtsev, B.A.**  
Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae-Leguminosae. Part 2. Family Leguminosae [1986, 188p., rus] 41-2361
- Iuzhakova, K.A.**  
Economic effectiveness of the mobile-crew and modular construction methods of heat and electric power plants in western Siberia [1986, p.49-51, rus] 41-882
- Ivanchenko, L.V.**  
Preliminary results of calibrating airborne ice crystal counters [1986, p.99-107, rus] 41-1556  
Using equipment designed for the "Selena-1" filters in studying natural and artificial ice-forming nuclei [1986, p.80-85, rus] 41-1451
- Ivanchikov, A.A.**  
Impact of wheeled vehicles on trees and soil cover during forest thinning in Karelia [1986, p.137-146, rus] 41-2379
- Ivanov, A.P.**  
Ultimate masses of large-size blocks transported by draw-plates and pneumatic rollers [1986, p.13-14, rus] 41-2780
- Ivanov, A.V.**  
Forest fire effect on chemical composition of snow cover in the Amur River area [1986, p.180-186, rus] 41-131  
Theory of cryogenic and glaciogenic hydrochemical processes [1987, 236p., rus] 41-3270
- Ivanov, B.V.**  
Characteristics of atmospheric and hydrophysical processes in Fram Strait during fall and winter [1986, p.151-157, eng] 41-3267  
Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship [1986, p.139-145, eng] 41-3265  
Parametrization of the structure of the active sea layer in the ice-edge zone [1986, p.146-150, eng] 41-3266  
Studies of ice-edge zones of Arctic seas [1986, p.131-138, eng] 41-3264
- Ivanov, I.I.**  
Evaluating production efficiency of pneumohydraulic sprayers of snow-producing equipment [1986, p.72-77, rus] 41-2156  
Using artificial snow for dust control during mass-detonations in mines [1986, p.197-200, rus] 41-2178
- Ivanov, I.V.**  
Age and evolution of soils in the USSR [1986, 230p., rus] 41-2352
- Ivanov, M.F.**  
Problems in automation of geophysical investigations. Collection of works [1985, 162p., rus] 41-3543
- Ivanov, M.S.**  
Subsurface ice in sand alluvium of the Lena River [1972, p.73-79, rus] 41-3748
- Ivanov, V.A.**  
Operation of power equipment of gas pipelines in western Siberia [1987, 143p., rus] 41-3687
- Ivanov, V.D.**  
Aerodynamics of road embankments (a discussion) [1985, p.25-26, rus] 41-503
- Ivanov, V.N.**  
Polystyrene foam used in construction of road and airport pavements [1986, p.14-16, rus] 41-1882  
Ways of increasing the service life of hydraulic structures within meliorative systems in frost-heaving ground [1985, p.61-63, rus] 41-306
- Ivanov, V.V.**  
Ground surface temperature above underground heat-pipelines [1986, p.94-97, rus] 41-2757
- Ivanova, E.L.**  
Studying the technology of building moorings of sea-water ice [1986, p.92-94, rus] 41-2161
- Ivanova, L.I.**  
Specifics of natural air transfer in Khibiny quarries [1985, p.51-53, rus] 41-2770
- Ivanovskii, L.N.**  
Results obtained in studying recent exogenic processes at the research stations of the Institute of Geography of Siberia and the Far East, Siberian Branch of the Academy of Sciences, USSR [1986, p.136-149, rus] 41-1202
- Iversen, W.R.**  
M.I.T. ice detector taxis for takeoff [1986, p.36, 38, eng] 41-260
- Iverson, N.R.**  
Extrusion flow demonstrated by borehole deformation measurements over a riegel, Storglaciären, Sweden [1987, p.72-78, eng] 41-3599
- Ives, J.D.**  
Mapping of mountain hazards [1986, p.111-124, eng] 41-1977
- Ivey, J.P.**  
Methanesulphonate in antarctic ice [1986, p.375-379, eng] 41-2503
- Ivin, I.A.**  
Studying frost heave in Chita City [1985, p.110, rus] 41-330
- Ivlev, A.I.U.**  
Changes in engineering-geocryological conditions of western Pur-Nadym interfluvium induced by economic development [1986, p.184-191, rus] 41-2839
- Iwai, K.**  
Morphological features of combination of bullet-type snow crystals observed at Syowa Station, Antarctica [1986, p.38-46, eng] 41-3656
- Iwasaka, Y.**  
Balloon observation of aerosols in the antarctic troposphere and stratosphere [1986, p.214-222, eng] 41-1752  
Descending motion of antarctic stratospheric aerosol layer in winter: possible effect on stratospheric water vapor budget [1986, p.13-18, eng] 41-3654  
Enhancement of antarctic stratospheric aerosol layer in winter: possible contribution of Aitken particle growth [1986, p.143-151, eng] 41-1019
- Iwasawa, S.**  
Countermeasures against damage by heavy snowfall in Akita District [1985, p.16, jpn] 41-179
- Iwata, H.**  
In-place surface recycling on expressways [1987, p.893-915, eng] 41-4047
- Iwata, S.**  
Process for distribution of supraglacial debris on the Khumbu Glacier, Nepal Himalaya [1986, p.129-131, eng] 41-754  
Topographic characteristics in the ablation area of the Khumbu Glacier, Nepal, Himalaya [1986, p.177-180, eng] 41-765
- Izakson, V.I.U.**  
Numerical methods for predicting and controlling thermal regime of rocks in permafrost areas [1986, 94p., rus] 41-2745
- Izmallov, V.V.**  
Albedo and heat balance of arctic snow-ice surfaces polluted with oil [1986, p.117-120, rus] 41-3869  
Anomalous thermal characteristics of ice polluted with petroleum products (experimental and theoretical studies) [1986, p.113-117, rus] 41-3868  
Basic methods and principal results of studying the role of physical, chemical and biologic factors in the cleaning of Arctic waters and ice from petroleum hydrocarbons [1986, p.171-173, rus] 41-2390  
Process of natural cleaning of the Arctic Basin surface (theoretical and experimental studies) [1986, p.51-58, rus] 41-4196
- Izmallova, O.V.**  
Field methods of estimating frost heave properties of grounds [1985, p.108-110, rus] 41-329
- Izumi, K.**  
Distribution of depth hoar in Honshu, Japan [1986, p.198-206, jpn] 41-2603  
Mobility of large-scale avalanche [1985, p.187-194, jpn] 41-4587  
Movement of a powder snow avalanche as recorded on a seismograph [1985, p.99-104, jpn] 41-4592  
On the powder snow avalanche which occurred in Shimamichi-kohsen, Nou-machi, Niigata Prefecture, 1986 [1986, p.168-170, jpn] 41-1221  
On the remnants of a powder snow avalanche which appeared during the snow melt season [1985, p.105-109, jpn] 41-4593
- Jacka, T.H.**  
Characteristics of the seasonal sea ice of East Antarctica and comparisons with satellite observations [1987, p.85-91, eng] 41-4441
- Jacks, G.**  
Acid surge in a well-buffered stream [1986, p.282-285, eng] 41-2311
- Jackson, L.E.**  
Floristic analysis of the distribution of epimeral plants in treeline areas of the western United States [1985, p.251-260, eng] 41-1246
- Jackson, N.**  
Investigation of seasonal load restrictions in Washington State [1985, p.58-67, eng] 41-609
- Jackson, P.**  
Archive of the ice record from Knob Lake, Quebec, 1954 to present [1985, p.284-289, eng] 41-1506
- Jackson, R.**  
Ice island lab shows petroleum potential [1986, p.1-4, eng] 41-2198
- Jacob, P.**  
Long-term record of H<sub>2</sub>O<sub>2</sub> in polar ice cores [1986, p.262-270, eng] 41-1756
- Jacobs, J.D.**  
Contemporary pollen deposition and the distribution of *Betula glandulosa* at the limit of low arctic tundra in southern Baffin Island, N.W.T., Canada [1985, p.279-287, eng] 41-1249
- Jacobs, S.S.**  
Oceanic inclusions in the J-9 sea-ice core [1985, p.113-115, eng] 41-2952  
Polar ice sheets: a wild card in the deck [1986, p.50-54, eng] 41-1900  
Recent advance of the Ross Ice Shelf, Antarctica [1986, p.464-474, eng] 41-4302  
Ross Sea oceanography, 1985 [1985, p.112-113, eng] 41-2951
- Jahn, A.**  
Fourth International Conference on Permafrost, Fairbanks, 18-22 July 1983 [1986, p.119-121, eng] 41-1346  
Remarks on the origin of palsa frost mounds [1986, p.123-130, eng] 41-1347
- Jahns, H.O.**  
Offshore outlook: the American Arctic [1985, p.76-82, eng] 41-1328
- Jain, Y.M.**  
Attenuation in melting snow on microwave- and millimetre-wave terrestrial radio links [1985, p.68-69, eng] 41-1408
- Jaksch, K.**  
Glacier outlet of the Vatnajökull in the upper course of the Djupa, southern Iceland [1984, p.97-103, ger] 41-805
- Jallo, N.**  
Collection efficiencies of soft-hail pellets for ice crystals [1984, p.177-178, eng] 41-4386
- Jameson, A.R.**  
Microphysical interpretation of radar polarization measurements [1984, p.791-792, eng] 41-4419  
On the melting of graupel and frozen raindrops [1982, p.384-387, eng] 41-41
- Jang, J.Y.**  
Combined forced and free convective flows of cold water over a vertical flat surface [1987, p.85-89, eng] 41-2406
- Janoo, V.C.**  
Laboratory investigations of low temperature cracking susceptibility of asphalt concrete [1987, p.397-415, eng] 41-4030
- Janson, J.E.**  
Swedish investigations of ice-structure interaction in the Baltic [1986, p.707-711, eng] 41-1126
- Janssen, D.J.**  
Effect of asphalt concrete overlays on the progression of durability cracking in Portland cement concrete [1985, 186p., eng] 41-1986
- Janssen, J.E.**  
Instrument for measuring building-envelope thermal resistance [1986, p.723-738, eng] 41-1386
- Jansson, J.-E.**  
Operational experience with the new-type Baltic icebreaker "Otso" [1986, p.1039-1060, eng] 41-1145
- Jäntti, M.**  
Adhesive strength of spray accreted ice on materials and coatings [1986, p.484-496, eng] 41-1114
- Jasman, R.**  
Effects of freezing on nitrite stability in aqueous solutions [1987, p.22-23, eng] 41-2808
- Jauho, P.**  
Arctic R & D—a niche for Finland [1986, p.21-24, eng] 41-2263
- Javanainen, M.**  
On the frequency analysis of ice peaks [1986, p.222-227, eng] 41-1098
- Jayarajne, E.R.**  
Replication of ice crystals using Formvar: techniques and precautions [1986, p.547-551, eng] 41-3222
- Jean, P.K.**  
Four-element CODAR beam forming [1986, p.296-303, eng] 41-4179  
Ice hazard detection with ground wave radar [1986, 84p., eng] 41-4580
- Jeck, R.K.**  
5500 miles of liquid water and droplet measurements in supercooled clouds below 10,000 feet AGL [1982, p.408-411, eng] 41-45  
Altitude and temperature dependence of wintertime, supercooled cloud variables up to 3 km above ground level [1984, p.741-744, eng] 41-4416  
Superstructure icing: non-suitability of current forecasting aids for navy ships [1986, p.439-445, eng] 41-946
- Jeffrey, N.E.**  
Arctic vessel research laboratory and program [1986, p.467-468, eng] 41-950

- Canada's new Institute for Marine Dynamics, opportunity for improved polar transportation [1986, p.149-168, eng] 41-2026
- Jeffries, D.S.**  
Storage and release of major ionic contaminants from the snowpack in the Turkey Lakes watershed [1986, p.215-221, eng] 41-2619
- Jeffries, M.O.**  
Arctic ice shelf growth, fiord oceanography and climate [1984, p.147-153, eng] 41-631  
Ground survey and mapping of ice edge changes and multi-year sea ice growth along the north coast of Ellesmere Island, N.W.T. [1986, p.96-99, eng] 41-747  
Remote sensing of sea-ice growth and melt-pool evolution, Milne Ice Shelf, Ellesmere Island, Canada [1987, p.145-150, eng] 41-4449
- Jegou, A.**  
Long-range transport of continental radon in subantarctic and antarctic areas [1986, p.178-189, eng] 41-1750
- Jenkins, T.F.**  
Losses of explosives residues on disposable membrane filters [1987, 25p., eng] 41-3820  
Removal of trace-level organics by slow-rate land treatment [1986, p.1417-1426, eng] 41-1349
- Jenkins, T.K.**  
Suitability of polyvinyl chloride well casings for monitoring munitions in ground water [1986, p.92-98, eng] 41-1345
- Jensen, F.O.**  
Corrosion control of steel reinforcement in offshore concrete structures [1986, p.405-413, eng] 41-360
- Jenssen, D.**  
Modelling the response of the West Antarctic Ice Sheet to a climatic warming [1987, p.321-358, eng] 41-3287  
Numerical modelling of the large-scale basal water flux under the West Antarctic Ice Sheet [1987, p.293-320, eng] 41-3286
- Jesberger, H.L.**  
Ground freezing '85—a summary [1987, p.301-306, eng] 41-3039
- Jessup, R.**  
Micromechanics approach to sea ice dynamics [1986, p.267-281, eng] 41-151
- Jessup, R.G.**  
Forecast techniques for ice accretion on different types of marine structures, including ships, platforms and coastal facilities [1985, 90p., eng] 41-1194
- Jew, P.**  
Polyethylene-modified bitumen for paving applications [1986, p.2685-2704, eng] 41-829
- Jezek, K.C.**  
Acoustical reflection and scattering from the underside of laboratory grown sea ice: measurements and predictions [1986, p.1486-1494, eng] 41-3068  
Folding in the Greenland ice sheet [1987, p.485-493, eng] 41-1976  
Glaciological investigations using the synthetic aperture radar imaging system [1987, p.11-19, eng] 41-4428
- Jiao, K.**  
Modern glaciers on the south slope of West Kunlun Mountains (in Aksayin Lake and Guozha Co Lake drainage areas) [1987, p.85-91, eng] 41-3919
- Jiji, L.M.**  
Boundary integral equation technique with application to freezing around a buried pipe [1987, p.223-232, eng] 41-2981
- Jin, T.**  
Snow blizzard in summertime—random notes on observations in Antarctica [1980, 216p., chi] 41-4125
- Jirka, G.H.**  
Outfall mixing design in shallow coastal water under Arctic ice cover [1985, p.856-862, eng] 41-1913
- Joba, J.C.**  
Guide to marine transportation information sources in Canada [1985, 308p., eng] 41-562
- Joe, P.**  
Numerical modelling of hail to rain conversion [1984, p.261-265, eng] 41-4396
- Joensuu, A.**  
Ice problems and research: ships and offshore structures in the Arctic [1986, p.392-399, eng] 41-2883  
Research on arctic offshore structures at WARC [1986, p.10-13, eng] 41-86
- Johannes, H.**  
VERGLIMIT—progress report on the use of ice-inhibiting additives in road surfacings [1981, p.207-219, ger] 41-1548
- Johannessen, J.A.**  
Mesoscale eddies in the Fram Strait marginal ice zone during the 1983 and 1984 Marginal Ice Zone Experiments [1987, p.6754-6772, eng] 41-4235
- Johannessen, O.**  
On estimating ice stress from MIZEX 83 ice deformation and current measurements [1986, p.17-19, eng] 41-3055
- Johannessen, O.M.**  
High-frequency internal wave observations in the marginal ice zone [1987, p.6911-6920, eng] 41-4247  
Ice-edge eddies in the Fram Strait marginal ice zone [1987, p.427-429, eng] 41-2802
- Introduction: Summer marginal ice zone experiments during 1983 and 1984 in Fram Strait and the Greenland Sea [1987, p.6716-6718, eng] 41-4231
- Tomographic resolution of mesoscale eddies in the marginal ice zone: a preliminary study [1987, p.6886-6902, eng] 41-4245
- Johannesson, T.**  
Response time of glaciers in Iceland to changes in climate [1986, p.100-101, eng] 41-748
- Johansen, J.M.**  
Water pollution from roadways [1985, 46p., nor] 41-2295
- Johansson, B.M.**  
Future icebreaker design [1986, p.169-200, eng] 41-2027  
Global ship ice impact forces determined from full-scale tests and analytical modeling of the icebreakers *Canmar Kigoriak* and *Robert LeMay* [1984, p.253-282, eng] 41-875
- Johansson, C.**  
Experimental study of the dry deposition of gaseous nitric acid to snow [1986, p.1165-1170, eng] 41-795
- Johari, G.P.**  
Transformation of an ice clathrate and hexagonal ice on compression at 77 K [1986, p.311-315, eng] 41-1237
- Johansen, S.J.**  
Least squares method used in reduction of data from theodolite measurements on fast moving glaciers [1986, p.42-46, eng] 41-736
- Johnson, A.I.**  
Hydrologic applications of space technology [1986, 488p., eng] 41-3894
- Johnson, D.B.**  
On the melting of graupel and frozen raindrops [1982, p.384-387, eng] 41-41
- Johnson, E.G.**  
Application of geotextiles in Alaska [1983, 64p., eng] 41-4071  
Evaluation of road construction by surcharge over muskeg [1982, 13p. + append., eng] 41-3048  
Nature of fines produced in aggregate processing [1987, p.10-21, eng] 41-2765  
Use of a reinforced earth slab to reduce embankment loads at Auke Bay, Alaska [1981, 21p., eng] 41-4067
- Johnson, E.R.**  
Alyeska Pipeline: monitoring, operations and maintenance [1986, p.126-132, eng] 41-2519
- Johnson, J.B.**  
Verification tests for a stiff inclusion stress sensor [1987, p.81-88, eng] 41-3301
- Johnson, M.L.**  
Partial phase diagram for the system NH<sub>3</sub>-H<sub>2</sub>O: the water-rich region [1985, p.39-47, eng] 41-1695
- Johnson, P.G.**  
Holocene paleohydrology of the St. Elias Mountains, British Columbia and Yukon [1986, p.47-53, eng] 41-2706  
Role of major floods in glacier basins [1986, p.82-87, 195-200, rus] 41-4346
- Johnson, P.P.**  
Geologic report for the Beaufort Sea planning area, Alaska: Regional geology, petroleum geology, environmental geology [1985, 192p. + maps, eng] 41-694
- Johnson, R.E.**  
Charged particle modification of ices in the Saturnian and Jovian systems [1985, p.301-315, eng] 41-1709  
Laboratory studies of ion irradiations of water, sulfur dioxide, and methane ices [1985, p.317-335, eng] 41-1710
- Johnson, T.**  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 1. Laboratory tests on soils from Winchendon, Massachusetts, test sections [1986, 70p., eng] 41-593
- Johnson, T.C.**  
Frost action predictive techniques for roads and airfields. A comprehensive survey of research findings [1986, 45p., eng] 41-3143  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation [1986, 138p., eng] 41-2549  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 2. Field validation tests at Winchendon, Massachusetts, test sections [1986, 62p., eng] 41-2613  
Resilient modulus of freeze-thaw affected granular soils for pavement design and evaluation. Part 3. Laboratory tests on soils from Albany County Airport [1987, 36p., eng] 41-2942
- Johnston, C.**  
Effects of microsilica and Class C fly ash on resistance of concrete to rapid freezing and thawing and scaling in the presence of deicing agents [1987, p.1183-1204, eng] 41-3723
- Johnston, G.H.**  
Proceedings [1986, 168p., eng] 41-2507
- Johnston, L.M.**  
Oxygen-18 studies of snowmelt runoff in a small Precambrian shield watershed: implications for streamwater acidification in acid-sensitive terrain [1986, p.213-234, eng] 41-2697
- Johnston, P.**  
Field observations of flow patterns generated by an ice keel in stratified flow [1986, p.328-349, eng] 41-154
- Johnstone, B.**  
New technique to gauge sea ice [1987, p.653, eng] 41-2737
- Jolma, P.**  
Mapping of snow-cover parameters by a spaceborne microwave radiometer [1986, p.209-214, eng] 41-3899
- Jolma, P.A.**  
Retrieval of the water equivalent of snow cover in Finland by satellite microwave radiometry [1986, p.855-862, eng] 41-2300
- Joly, D.**  
Comparison study of climate between sandur and tundra regions by three types of weather [1985, p.95-101, fre] 41-376
- Jonas, P.R.**  
Examples of the operational utility of radar observations of cold air vortices [1986, p.247-256, eng] 41-1808
- Jonasson, S.**  
Influence of frost heaving on soil chemistry and on the distribution of plant growth forms [1986, p.185-195, eng] 41-1877
- Jonasson, W.B.**  
Caisson wellheads allow for future use of offshore exploration wells [1987, p.81-85, eng] 41-2571
- Jones, D.**  
Outfall mixing design in shallow coastal water under Arctic ice cover [1985, p.856-862, eng] 41-1913
- Jones, E.B.**  
Watershed management in the eighties: proceedings [1985, 317p., eng] 41-448
- Jones, H.G.**  
Dynamics and mass balance of NO<sub>3</sub> anion and SO<sub>4</sub>(2) anion in meltwater and surface-runoff during spring melt in a boreal forest [1987, p.19-31, eng] 41-4314  
Influence of boreal forest cover on the chemical composition of snowcover [1984, p.126-138, eng] 41-1953  
Integrated model of snowmelt quality for boreal forest sites [1985, p.69-83, eng] 41-1486  
Snowmelt in a boreal forest site: an integrated model of meltwater quality (SNOQUAL1) [1986, p.431-439, eng] 41-2622
- Jones, K.**  
Ice management procedures for specialized drilling structures [1986, p.764-791, eng] 41-2057
- Jones, N.**  
Effect of sub-surface irregularities on the strength of multi-year ice [1987, p.225-238, eng] 41-2426  
Note on ice scaling [1986, p.134-135, eng] 41-259
- Jones, N.K.**  
Evidence for a Neoglacial advance of the Boundary Glacier, Banff National Park, Alberta [1985, p.1753-1755, eng] 41-1240
- Jones, P.**  
Sea ice melt water, a source of alkalinity, calcium and sulfate? Results from the CESAR ice station [1985, p.90-96, eng] 41-592
- Jones, P.H.**  
Effect of salt application on roadway safety and mobility [1986, 90p., eng] 41-1413
- Jones, R.E.**  
Constitutional supercooling in natural ice [1985, p.188-196, eng] 41-1494
- Jones, R.H.**  
Frost susceptibility tests and their application [1981, p.45-50, eng] 41-2925  
Proceedings [1981, 207p., eng] 41-2923
- Jones, S.J.**  
Canada's new Institute for Marine Dynamics, opportunity for improved polar transportation [1986, p.149-168, eng] 41-2026  
Observation of a model-scale semisubmersible in pack ice [1987, p.341-350, eng] 41-2441  
Transformation of an ice clathrate and hexagonal ice on compression at 77 K [1986, p.311-315, eng] 41-1237
- Jönsson, H.H.**  
Snow avalanches in Iceland in the 1982-1983 winter [1984, p.159-164, ice] 41-808
- Jordaan, I.J.**  
Probabilistic theories for the failure of sea ice [1986, p.37-54, eng] 41-1581  
Rational approach to the development of probabilistic design criteria for Arctic shipping [1987, p.401-406, eng] 41-2449
- Jordan, J.A.**  
Development of precipitation near the top of a maritime convective cloud [1982, p.211-214, eng] 41-18
- Jørgensen, P.M.**  
Macrobenthos of Bouvetøya [1986, p.23-34, eng] 41-918  
Phytogeographical relations of the cryptogamic flora of Bouvetøya [1986, p.71-79, eng] 41-923
- Jørgensen, T.**  
Water pollution from roadways [1985, 46p., nor] 41-2295
- Jørgensen, T.S.**  
Consequences of sea spray icing on marine units, and a brief survey of current research activities [1986, p.447-470, eng] 41-1112

- Josberger, E.G.**  
Bottom ablation and heat transfer coefficients from the 1983 marginal ice zone experiments [1987, p.7012-7016, eng] 41-4256
- Josshans, H.W.**  
Regional geology and seabed dynamics at the proposed iceberg scour (DIGS) experiment site [1986, p.132-137, eng] 41-3102
- Joseph, P.**  
Thermally associated fatigue crack growth through asphalt overlays: an experimental investigation [1987, p.453-491, eng] 41-4032
- Journaux, A.**  
Forms of periglacial erosion in Provence [1986, p.131-139, fre] 41-3582
- Joy, M.**  
Study of the sodium in private domestic wells in a selected area of York region [1979, 17p., eng] 41-237
- Juday, G.P.**  
Early results of the Rosie Creek Fire Research Project 1984 [1985, 46p., eng] 41-570
- Judge, A.S.**  
Ground probing radar in the investigation of the competency of frozen tailings pond dams [1987, p.191-197, eng] 41-4012
- Judge, J.T.**  
Sea-floor stability study, inner Scotian Shelf [1987, 80p., eng] 41-4531
- Judson, A.**  
Multi-basin avalanche simulation: a model [1986, p.35-47, eng] 41-1302
- Jumppanen, P.**  
Arctic offshore research in VTT structural laboratories [1985, p.51-53, eng] 41-3085
- Jumppanen, P.**  
Development of new advanced materials for sub-arctic and arctic offshore structures [1986, p.833-968, eng] 41-1135
- Junquera Villela, R.**  
Travelling in antarctic weather [1986, p.42-55, por] 41-587
- Jurica, G.M.**  
Field evidence of summer convective processes on the Texas South Plains [1982, p.354-357, eng] 41-33
- Justice, J.T.**  
Explosion welding of a large diameter gas transmission pipeline [1986, p.1-13, eng] 41-77
- Juurmaa, K.**  
Beginning the construction of the atomic icebreaker *Taymyr* [1985, p.44-45, rus] 41-1518
- Juvkam-Wold, H.C.**  
Spray-ice islands evaluated for Arctic-drilling structures [1986, p.57-66, eng] 41-646
- Kachurin, L.G.**  
Nonthermal radio-frequency emission from intensely deforming ice covers of natural bodies of water [1984, p.441-448, eng] 41-819
- Kaden, R.**  
Durability of shotcrete [1987, p.1071-1101, eng] 41-3719
- Kaderov, E.A.**  
Dynamics and hydrophysical properties of forest litter in the Krasnoyarsk forest steppes [1986, p.172-176, rus] 41-816
- Kagan, A.A.**  
Engineering and geological conditions of construction and operation of hydraulic structures built on perennially frozen hard rocks [1986, p.34-44, rus] 41-3444
- Kagan, A.G.**  
Calculating hydrological characteristics of the Mertsbakher Lake outburst [1986, p.36-43, rus] 41-546
- Kagan, I.L.**  
Studying hydraulic drive of drilling equipment at low temperatures [1978, p.63-68, rus] 41-1323
- Kagotani, M.**  
Factor analyses of damage modes of asphalt pavements [1987, p.511-523, eng] 41-4034
- Kahn, P.B.**  
Solidification in finite bodies with prescribed heat flux: bounds for the freezing time and removed energy [1987, p.233-240, eng] 41-2982
- Kajaste-Rudnitski, J.**  
Viscoelastic approach to the ice load evaluation [1986, p.407-420, eng] 41-1608
- Kaji, H.**  
Development of heavy thick HT80 steel plates for racks of jack-up rigs [1987, p.B-14, eng] 41-3940
- Kaji, S.**  
Fracture toughness and macrofractography of single crystal ice [1986, p.107-112, jpn] 41-2187
- Kajikawa, M.**  
Improved approach to calculating terminal velocities of plate-like crystals and graupel [1987, p.1088-1099, eng] 41-3853
- Kajikawa, Y.**  
Surface configuration of the antarctic ice sheet in the sector 30 deg E-80 deg E using SEASAT altimetry data [1986, p.1-12, eng] 41-1469
- Kalachev, V.I.A.**  
Non-destructive control method for studying thixotropic changes in clayey grounds [1987, p.80-94, rus] 41-3400
- Kaldjian, M.J.**  
Ice-sheet failure against inclined and conical surfaces [1987, p.145-152, eng] 41-4176
- Kalinina, G.N.**  
Strength of granular ice [1986, p.129-134, rus] 41-2165
- Kalinina, G.N.**  
Strength of reinforced-ice materials [1986, p.135-139, rus] 41-2166
- Kalluzhnyi, E.F.**  
Using a model of capillary porous body for calculating water seepage into soil [1986, p.108-116, rus] 41-3589
- Kalluzhnyi, I.L.**  
Drifting of snow in Northern Kazakhstan [1986, p.67-74, eng] 41-3680
- Kalluzhnyi, I.L.**  
Observation and calculation of snow cover characteristics in agricultural fields at different snow-retention methods [1986, p.22-37, rus] 41-3585
- Kalluzhnyi, L.A.**  
Influence of forestry and forest complexes on river runoff [1986, p.71-75, rus] 41-1368
- Kallas, B.F.**  
Low-temperature mechanical properties of asphalt concrete [1982, 53p., eng] 41-2136
- Kalliomaki, N.M.**  
Thermal index and thermal conductivity of snow and their relationship to winter survival of the meadow vole, *Microtus pennsylvanicus* [1984, p.153-164, eng] 41-1957
- Kalmykov, A.A.**  
Prospects of using autoregression methods in measuring ice thickness by continuous radiation systems [1986, p.126-130, rus] 41-705
- Kalov, Kh.M.**  
Short-wave radiation balance and heat flux in soil on the northern slopes of Central Caucasus. Alpine Meteorological Experiment (ALPEX) [1985, p.66-75, rus] 41-1039
- Kärnä, J.**  
Icebreaking tanker transit simulation model [1986, p.1138-1159, eng] 41-1150
- Kamath, J.**  
Frost formation between closely spaced parallel plates [1985, 121p., eng] 41-985
- Kamb, B.**  
Rheology of ice II and ice III from high-pressure extrusion [1986, p.693-696, eng] 41-1261
- Kamb, B.**  
Stress-gradient coupling in glacier flow: I. longitudinal averaging of the influence of ice thickness and surface slope [1986, p.267-284, eng] 41-688
- Kamb, B.**  
Stress-gradient coupling in glacier flow: II. longitudinal averaging in the flow response to small perturbations in ice thickness and surface slope [1986, p.285-298, eng] 41-689
- Kamb, B.**  
Stress-gradient coupling in glacier flow: III. exact longitudinal equilibrium equation [1986, p.335-341, eng] 41-4285
- Kamb, B.**  
Stress-gradient coupling in glacier flow: IV. Effects of the "T" term [1986, p.342-349, eng] 41-4286
- Kamb, B.**  
Waves of accelerated motion in a glacier approaching surge: the mini-surges of Variegated Glacier, Alaska, U.S.A. [1987, p.27-46, eng] 41-3593
- Kamb, V.K.**  
Selection of optimal dimensions for hydraulic structures in ports [1986, p.77-81, rus] 41-1396
- Kamenskii, R.M.**  
Accumulation and preservation of massive artificial sea ice [1986, p.167-172, rus] 41-2172
- Kaminuma, K.**  
Activities of Japanese earth science research in the McMurdo Sound region in the 1985-1986 season [1986, p.138-147, jpn] 41-981
- Kaminuma, K.**  
Comments on the map of free-air gravity anomaly of the antarctic region [1986, p.19-22, eng] 41-1471
- Kaminuma, K.**  
Processing of sea gravity data using online navigational information of icebreaker *Shirase* [1986, p.13-18, eng] 41-1470
- Kamiyama, K.**  
Characteristics of the Yala Glacier from the viewpoint of tritium content [1986, p.11,841-11,844, eng] 41-1856
- Kamiyama, K.**  
Glaciological research program in east Queen Maud Land, East Antarctica, Part 5, 1985 [1987, 71p., eng] 41-3668
- Kanaev, L.A.**  
Analysis and monitoring of avalanche glaciostystems [1986, p.43-53, rus] 41-104
- Kanaev, L.A.**  
Method of calculating the warm-up date of snow cover [1986, p.10-23, rus] 41-771
- Kanarskii, V.F.**  
Influence of cryogenic phenomena on the performance of monolithic, concrete, filterless reinforcement of slopes of cohesive-earth dams [1986, p.41-43, rus] 41-1403
- Kanda, H.**  
Flora and vegetation of mosses in ice-free areas of Soya Coast and Prince Olav Coast, East Antarctica [1981, p.91-100, eng] 41-3567
- Kanda, H.**  
Seasonal changes of some environmental factors around the moss vegetation near Syowa Station, East Antarctica [1986, p.17-26, eng] 41-1043
- Kandil, F.T.**  
Formation and melting of a vertical ice slab in an enclosure [1987, p.167-177, eng] 41-2882
- Kane, D.**  
Permafrost [1986, p.99-106, eng] 41-476
- Kane, D.L.**  
Plot measurements of snowmelt runoff for varying soil conditions [1984, p.123-135, eng] 41-3320
- Kang, E.**  
Preliminary glacio-hydrological comparison of some glaciers of the Swiss Alps and the Chinese Tian Shan [1986, p.9-18, 130-139, rus] 41-4333
- Kannukene, L.R.**  
Leafy mosses in the vicinity of Kresty village (southern tundra subzone, western Taymyr) [1986, p.89-100, rus] 41-1335
- Kanovich, L.F.**  
Start-up dynamics of an arterial heat pipe from the frozen or chilled state [1987, p.1283-1288, eng] 41-4161
- Kantha, L.H.**  
Comments on *A heat balance for the Bering Sea ice edge* [1986, p.2205-2208, eng] 41-2843
- Kapitsa, A.P.**  
Theory of cryogenic and glaciogenic hydrochemical processes [1987, 236p., rus] 41-3270
- Kaplan, A.A.**  
Circum-Arctic petroleum potential [1986, p.101-130, eng] 41-2606
- Kaplan, A.V.**  
Improving the reliability of 204M excavators under northern conditions [1986, p.11-16, rus] 41-4525
- Kaplan, I.R.**  
Biogenic and anthropogenic organic compounds in rain and snow samples collected in southern California [1986, p.115-124, eng] 41-4540
- Kaplan, F.A.**  
Relics of Pleistocene ice sheets in permafrost areas as an object of paleoglaciological studies [1986, p.65-72, rus] 41-107
- Kaplan, I.R.**  
Remnants of the Pleistocene ice sheets in the permafrost zone as an object for paleoglaciological research [1986, p.257-266, eng] 41-3616
- Kaplan, T.N.**  
Formation of frozen rocks and forecasts of cryogenic processes [1986, 228p., rus] 41-2813
- Kaplan, T.N.**  
On cryogenic formations [1986, p.3-14, rus] 41-2814
- Kaplan, T.N.**  
Topographic analysis of the lower Kolyma River for cryolithologic mapping [1986, p.51-60, rus] 41-2819
- Karachenov, A.T.**  
Model of Pleistocene glaciation of the system "glaciers-ocean-troposphere-atmosphere" [1986, p.38-45, rus] 41-1635
- Karal, K.**  
Offshore and Arctic pipelines—1987 [1987, 199p., eng] 41-4628
- Karandaveva, L.M.**  
Regional methods of calculating mean summer air temperature and the annual course of global radiation in Central Asia [1986, p.71-80, rus] 41-777
- Karasik, A.M.**  
Allowing for variations in electromagnetic surveys of the Arctic Basin [1978, p.83-92, rus] 41-999
- Karavaev, A.V.**  
State of stress and thermal stresses in concretes and reinforced concretes of hydraulic structures [1985, 104p., rus] 41-428
- Karavaev, I.I.**  
Water protection structures at railroads [1986, 211p. (Per-tinent p.123-211), rus] 41-517
- Kardanov, I.U.B.**  
Studies of electromagnetic irradiance in the radio-frequency range during avalanche movement [1985, p.31-34, rus] 41-841
- Karelin, I.D.**  
Nature of winter ruptures in sea ice covers [1986, p.131-134, rus] 41-121
- Karelin, I.D.**  
On the causes of continuity disturbance of sea-ice cover in winter [1986, p.110-116, rus] 41-4204
- Karelova, T.**  
Snow-dumping places and snow transport [1983, p.274-278, fin] 41-1936
- Karger, A.**  
Baykal-Amur line—a railroad discloses Siberia [1985, p.38-48, ger] 41-3077
- Kargin, G.M.**  
Allowing for freezing temperature when assigning the type of concrete according to its frost resistance in the zone of variable water level [1985, p.44-49, rus] 41-418
- Kargin, G.M.**  
Protection of the concrete of hydraulic structures from the effects of temperature and moisture [1986, p.293-299, eng] 41-2940
- Karl, A.**  
Foundation construction in complex engineering-geological conditions in Finland [1985, p.42-43, rus] 41-295
- Karlén, W.**  
Climatic changes on a yearly to millennial basis [1984, 667p., eng] 41-2005

- Global ice-sheet system interlocked by sea level [1986, p.3-26, eng] 41-611
- Karlqvist, A.  
Swedish and Nordic polar research [1986, p.105-112, eng] 41-967
- Karlsson, V.  
Major inorganic ions in the North Pole snow samples [1987, p.8-13, eng] 41-3369
- Karnaukhov, A.V.  
Studying the working process of hydropneumatic hammers of the EO-2621 excavators [1978, p.74-78, rus] 41-1325
- Karpenko, N.N.  
Drilling-complex BTSE-600 in hard rocky ground [1986, p.41, rus] 41-2790
- Karpov, A.V.  
Methods of determining atmospheric and oceanic parameters from satellite data [1986, 160p., rus] 41-2714
- Karpov, B.N.  
Effective sectional road pavements for northern regions and Siberia [1986, 96p., rus] 41-2211
- Karpov, E.G.  
Morphology of a tabular body of ground ice and the dynamics of the development of the Ledianaya Gora exposure [1986, p.267-272, eng] 41-3617  
Origin and stratigraphic position of thick ground-ice layers in the Ledianaya Gora outcrop [1986, p.73-78, rus] 41-1907  
Study of tabular ground ice bodies from the Ledianaya Gora section in the Yenisey valley using the oxygen isotope method [1986, p.32-38, eng] 41-1789
- Karpov, S.V.  
Method of laying pipelines at low temperatures [1987, p.12-13, rus] 41-3810
- Karpov, V.V.  
Distributing device 110 kv with mobile reel-carriage switches [1986, p.9-10, rus] 41-912
- Kartashov, I.P.  
Quaternary research (Selected papers of the 11th INQUA Congress) [1986, 200p., rus] 41-549
- Karskiapp, R.I.A.  
Traces of Late-Pleistocene buried glacier ice and the related lithomorphogenetic problems [1986, p.78-83, rus] 41-109
- Karolin, G.G.  
Organization of construction under special environmental and climatic conditions. Construction manual [1986, 255p., rus] 41-2862
- Karyshova, V.A.  
Concretes with complex admixtures for the Sayano-Shushenskaya dam [1985, p.71-73, rus] 41-419
- Kasahara, A.  
Evaluation of bearing capacity of asphalt pavement with low-temperature transverse crackings [1987, p.307-396, eng] 41-4029
- Kaser, G.  
Role of evaporation from snow and ice in mass balance of glaciers [1986, p.59-63, 185-188, eng] 41-1056
- Kashperuk, P.I.  
Regionalization of the territory of the Western Siberian Plate according to the distribution and average annual temperatures of perennially frozen and thawed ground [1985, p.66-72, rus] 41-2970  
Southern boundary of permafrost distribution within the West Siberian Plain [1986, p.106-113, rus] 41-3776
- Kas'yanova, L.N.  
Productivity of natural meadows in the upper Angara River delta [1986, p.78-83, rus] 41-1404
- Kashevich, L.N.  
Use of water resources and the formation of water-reservoir shores in Siberia [1986, p.3-7, rus] 41-811
- Kassinos, A.  
Effects of density change and subcooling on the melting of a solid in a rectangular enclosure [1986, p.1787-1792, eng] 41-3296
- Katsev, V.V.  
Water supply and sewage disposal in the Yamal Peninsula [1987, p.8-9, rus] 41-3935
- Katayama, K.  
Basic research on the latent heat thermal energy storage utilizing the contact melting phenomena [1986, p.2946-2952, eng] 41-2109
- Katharine and Bryant Mather International Conference on Concrete Durability, Atlanta, GA, April 27-May 1, 1987  
Concrete durability [1987, 2179p. (2 vols.), eng] 41-3690
- Katila, R.  
Weldable, high strength, high toughness cast steel for sub-arctic offshore applications [1986, p.911-932, eng] 41-1138
- Kato, I.  
Countermeasures against damage by snowfall on distribution facilities [1985, p.29-32, jpn] 41-184
- Kato, K.  
Short-term variation of oxygen isotopic composition of falling snow [1986, p.353-363, eng] 41-2502
- Katsumoto, N.  
Development of high strength welding materials for low temperature service [1986, p.97-105, eng] 41-2312
- Katsuta, Y.  
Development of the low power data logger for the antarctic use [1986, p.175-188, jpn] 41-2694
- Katsuyama, Y.  
Transmission loss of coated single-mode fiber at low temperatures [1980, p.4200-4205, eng] 41-264
- Kattelmann, R.  
Snow management at ski areas: hydrologic effects [1985, p.264-272, eng] 41-453  
Water release from a forested snowpack during rainfall [1987, p.265-272, eng] 41-4316
- Katzenkov, V.A.  
Using the UBM-20A assembly for drilling large-diameter wells in permafrost [1986, p.24-27, rus] 41-2533
- Kawada, K.  
Borehole closure at Mizuho Station, Antarctica [1986, p.66-73, eng] 41-3659
- Kawada, S.  
Dielectric studies of RbOH-doped ice and its phase transition [1986, p.4485-4491, eng] 41-2468
- Kawaguchi, K.  
Experimental decomposition of particulate organic matter collected under the fast ice in Lützow-Holm Bay, Antarctica, with special reference to the fate of carbon, nitrogen and phosphorus [1986, p.55-66, eng] 41-3632  
Oceanographic and marine biological data based on the routine observations near Syowa Station between Feb. 1984 and Jan. 1985 (JARE-25) [1987, 21p., eng] 41-3667  
Overwintering strategy of antarctic krill (*Euphausia superba* Dana) under the coastal fast ice off the Ongul Islands in Lützow-Holm Bay, Antarctica [1986, p.67-85, eng] 41-3633  
Snow algal blooms and their habitat conditions observed at Syowa Station, Antarctica [1986, p.191-197, eng] 41-3635
- Kawaguchi, S.  
Proceedings of the Eighth Symposium on Polar Meteorology and Glaciology [1986, 113p., eng] 41-3653
- Kawal, K.  
Development of high strength welding materials for low temperature service [1986, p.97-105, eng] 41-2312
- Kawamura, K.  
Biogenic and anthropogenic organic compounds in rain and snow samples collected in southern California [1986, p.115-124, eng] 41-4540
- Kawamura, T.  
Formation processes of brine drainage channels in sea ice [1987, p.7195-7197, eng] 41-4272  
Method for growing large single crystals of sea ice [1986, p.320-303, eng] 41-691  
Observation of internal structure in sea ice by X-ray computed tomography [1986, p.59-67, jpn] 41-3680
- Kawasaki, T.  
Indentation tests of laboratory and field ice sheets [1986, p.712-724, eng] 41-1127
- Kawatani, T.  
On the numerical analysis of heat transfer with phase change in groundwater flow of large Peclet number [1985, p.206-217, eng] 41-3340
- Kawecka, B.  
Ecology of snow algae [1986, p.407-415, eng] 41-3360
- Kay, B.D.  
Ground freezing '85—a summary [1987, p.301-306, eng] 41-3039
- Kazachevskii, I.V.  
Neutron-activation analysis of lichens and coniferous needles of cedar and fir for air pollution control of southern Pribylovie [1987, p.91-102, rus] 41-3947
- Kazakov, L.A.  
Stability of forest ecosystems at their northern limit of distribution [1986, p.62-63, rus] 41-3541
- Kazanski, A.R.  
Possible mechanism of surges originating in bodies of pulsating glaciers [1986, p.87-92, 200-205, rus] 41-4347
- Kazantsev, V.A.  
Salt transfer from soil to snow [1984, p.151-155, rus] 41-4091  
Salt transfer processes in cryogenic soils [1986, p.245-250, rus] 41-1745
- Kazarnovskii, I.I.  
Design and construction of mobile buildings on railroad construction sites of the North [1986, p.21-23, rus] 41-1533
- Kazarnovskii, V.D.  
Efficient construction of road pavements for the Tiumen' region [1986, p.10-12, rus] 41-509
- Kenge, P.  
Fluctuations of Heard Island glaciers and related climatic changes [1986, p.89-95, 209-214, eng] 41-1059
- Kenge, P.L.  
Recent changes in the glaciers of Heard Island [1986, p.255-271, eng] 41-1020
- Kedrowski, R.A.  
Environmental controls over carbon, nitrogen and phosphorus fractions in *Eriophorum vaginatum* in Alaskan tussock tundra [1986, p.167-196, eng] 41-2189
- Keith, T.G., Jr.  
Enthalpy method applied to phase change problems in arbitrarily shaped regions [1986, p.194-205, eng] 41-3339
- Kej, A.  
Ice-ocean modelling in the East Greenland area [1986, p.380-398, eng] 41-1108
- Kellher, T.E.  
Modelling of Labrador Sea pack ice, with an application to estimating geostrophic currents [1987, p.161-176, eng] 41-4493
- Keller, W.A.  
Induction of freezing tolerance in an embryogenic cell suspension culture of *Brassica napus* by abscisic acid at room temperature [1986, p.23-32, eng] 41-2225
- Kellner, G.  
Observation of the planetary boundary layer in the marginal ice zone [1987, p.6955-6965, eng] 41-4251
- Kellogg, D.E.  
Amundsen Sea sediment coring [1985, p.79-81, eng] 41-2635
- Kellogg, T.B.  
Amundsen Sea sediment coring [1985, p.79-81, eng] 41-2635
- Kelly, D.F.  
Daring to challenge deep water, thick ice [1985, p.6-14, eng] 41-3411
- Kelly, P.L.  
United States offshore developments in the Bering and Beaufort Seas [1986, p.124-148, eng] 41-2269
- Kelly, R.D.  
Lake-effect snow storms on Lake Michigan, USA [1982, p.87-101, eng] 41-3375
- Kemmerikh, A.O.  
Regularities governing altitudinal belts of maximum river discharge in Tadzhikistan [1986, p.166-170, rus] 41-128  
Role of glaciers in the discharge of Pamiro-Alai rivers [1985, p.79-84, rus] 41-1817
- Kempema, E.W.  
Anchor ice and bottom-freezing in high-latitude marine sedimentary environments: observations from the Alaskan Beaufort Sea [1986, 21p., eng] 41-1209  
Field observations on slush ice generated during freezeup in Arctic coastal waters [1986, 19p., eng] 41-1211  
Flume studies and field observations of the interaction of frazil ice and anchor ice with sediment [1986, 48p., eng] 41-1210  
Thirty-four-year shoreface evolution at a rapidly retreating Arctic coastal site [1987, p.161-164, eng] 41-3469
- Kempf, J.L.  
Microearthquakes under and alongside Ice Stream B, Antarctica, detected by a new passive seismic array [1987, p.30-34, eng] 41-4430
- Kendrick, A.  
NAWS—a hull stress monitoring system for arctic ships [1986, p.407-419, eng] 41-943
- Kennard, P.  
Glacier volume estimation on Cascade volcanoes—an analysis and comparison with other methods [1986, p.59-64, eng] 41-739
- Kennard, P.M.  
Ice volumes on Cascade volcanoes: Mount Rainier, Mount Hood, Three Sisters, and Mount Shasta [1986, 28p., eng] 41-4638
- Kennedy, F.E., Jr.  
Friction of solids on ice [1986, 4p., eng] 41-2134
- Kennedy, J.B.  
Temperature distribution in composite bridges [1987, p.475-482, eng] 41-2485
- Kennedy, J.F.  
Ice-engineering: research after the rush [1987, p.(A)22-(A)33, eng] 41-3353
- Kennedy, T.W.  
Prevention of water damage in asphalt mixtures [1985, p.119-133, eng] 41-3336
- Kennett, J.P.  
Latest Miocene benthic delta O-18 changes, global ice volume, sea level and the 'Messinian salinity crisis' [1986, p.411-414, eng] 41-1174
- Kent, G.S.  
Characteristics of Arctic polar stratospheric clouds as measured by airborne lidar [1986, p.2149-2161, eng] 41-2550
- Kerber, A.G.  
Floodplain land cover mapping using thematic mapper data [1986, p.1057-1064, eng] 41-3994
- Kerbi, S.B.  
Statistical method of separating the background component of snow pollution near industrial sources [1986, p.119-123, rus] 41-653
- Kerekiltas, L.G.  
Rock failure under thermo-cyclic loads [1987, 248p., rus] 41-4152
- Keremkulov, V.A.  
Calculating burst-flooding of moraine-dammed lakes emptying through intraglacial drainage systems [1986, p.110-113, 221-224, rus] 41-4353
- Kerimov, A.M.  
Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples [1985, p.71-78, rus] 41-846
- Kerr, A.D.  
Effect of oscillatory loads on the bearing capacity of floating ice covers [1987, p.219-224, eng] 41-3032



- Kerr, A.D.** (cont.)  
Response of floating ice beams and plates with partial flooding [1986, p.75-86, eng] 41-1584
- Kerr, B.**  
Man vs. McKinley [1986, p.2-8, eng] 41-1841
- Kersey, K.**  
Effects of road salt upon stream invertebrates [1979, 12p., + append., eng] 41-232  
Laboratory and field studies on the effects of road de-icing salt on stream invertebrates [1981, 21p., eng] 41-240
- Kershaw, L.J.**  
Vascular plants of mountain talus slopes, Mt. Rae area, Alberta, Canada [1986, p.218-230, eng] 41-1256
- Kettle, R.J.**  
Assessment of freeze-thaw damage in cement stabilised soils [1986, p.16-31, eng] 41-641
- Keyser, J.H.**  
Selection and use of de-icing chemicals and abrasives in North America and overseas [1978, p.5-13, eng] 41-379
- Khabibullina, E.N.**  
Reaction of loess soils with hydrofluosilicic acid and carbamide resins [1986, p.53-57, rus] 41-601
- Khachian, G.A.**  
Economic effectiveness of the mobile-crew and modular construction methods of heat and electric power plants in western Siberia [1986, p.49-51, rus] 41-882
- Khaime, N.M.**  
Supplying engineering and geological data on mass construction objects [1986, p.37-49, rus] 41-1537
- Khamshli, E.V.**  
Crystalline substances and products (methods of estimating and improving qualities) [1986, 222p., rus] 41-482
- Khanazarov, A.A.**  
Microflora of alpine landscapes in western Tien Shan and its role in biochemical weathering (the case of the Sukoksay River basin) [1985, p.77-81, rus] 41-4562
- Kharit, M.D.**  
State of corrugated metal culverts during operation [1986, p.12-13, rus] 41-1531
- Kharitonov, G.G.**  
Method of calculating the warm-up date of snow cover [1986, p.10-23, rus] 41-771  
Numerical classification of dry and wet snow avalanches based on standard meteorological observations [1986, p.23-32, rus] 41-772
- Kharitonov, V.G.**  
Diatomaceous algae (periphyton and phytobenthos) in water bodies of the flooding zone of the Kolyma Power Plant [1985, p.91-105, rus] 41-4121
- Khegal, A.I.U.**  
Artificial drainage of a burst-threatening lake located at the foot of a surging glacier [1986, p.108-110, 220-221, rus] 41-4352
- Kheisin, D.E.**  
Sea ice dynamics. Mathematical models [1987, 272p., rus] 41-3145
- Kheronskii, E.S.**  
Results of studying soils and ground in the central BAM area [1986, p.104-118, rus] 41-425
- Khitun, O.V.**  
Some characteristics of structural adaptation of boreal plants to Arctic conditions [1986, p.15-22, rus] 41-2599
- Khmelevskoi, I.F.**  
Spore and pollen distribution in snow on the southern slope of El'brus Mountain [1986, p.113-115, rus] 41-1649
- Rhodakov, V.G.**  
Hydrological investigations in the Mimer River basin, Svalbard, in 1983 [1986, p.309-316, eng] 41-3622  
Prospects for utilizing snow-ice resources [1986, p.140-144, rus] 41-1656  
Theory and practice of the spray-cone ice formation technique [1986, p.60-66, rus] 41-2154
- Rholodov, V.V.**  
Calculating wind loads on power line supports, allowing for icing [1986, p.66-68, rus] 41-885
- Rholopova, L.I.**  
Recommendations for the factory finishings of new standard house facades for northern towns [1986, 39p., rus] 41-3021
- Rhomeniuk, I.U.V.**  
Using pattern recognition methods in engineering-glaciological terrain analysis [1986, p.165-169, rus] 41-1662
- Rhomich, V.A.**  
Winter activities in the non-chernozem region [1986, p.15-17, rus] 41-2555
- Rhomutinnikov, N.M.**  
Integrated groups of concrete-placing equipment in polar regions [1987, p.5-7, rus] 41-3065
- Rhomutov, V.A.**  
Construction of 110 kV substations using low-oil breakers in northern areas of the Tyumen' region [1986, p.22-23, rus] 41-1920  
Substations 110/6-10 kv built in the Urengoy gas field area [1986, p.6-7, rus] 41-910
- Rhorev, V.S.**  
Supplying engineering and geological data on mass construction objects [1986, p.37-49, rus] 41-1537
- Rhorguani, V.G.**  
Microphysical conditions of hail formation in clouds [1984, p.287-290, eng] 41-4402  
Microstructural characteristics of hailstone embryos [1986, p.229-237, rus] 41-3672  
Results of size distribution study of natural ice-forming nuclei using a universal cascade aerosol sampler [1986, p.55-63, rus] 41-3671  
Size dependence of natural aerosol for ice nucleation [1986, p.28-32, rus] 41-2879
- Rhramtsov, V.I.**  
Blasting-mechanical method of excavating frozen ground [1986, p.16-18, rus] 41-1526
- Rhrenov, N.N.**  
Evaluating the state of gas pipelines from space photographs [1986, p.27-29, rus] 41-3212  
Statistical modeling of pipeline interaction with the environment [1987, p.40-43, rus] 41-4154
- Rhrianina, L.P.**  
Model of stresses in the Antarctic lithosphere induced by ice loads [1986, p.97-102, rus] 41-1166
- Rhristov, I.U.V.**  
Estimating the accuracy of data on snow depth in avalanche catchments [1986, p.201-206, rus] 41-135
- Rhristoforov, A.V.**  
Provision of hydrological information for rational use of natural resources to the Task Economic Complex of the BAM zone [1986, p.156, rus] 41-3983
- Rhromets, D.I.U.**  
Thermal performance of the building envelope [1986, 400p., rus] 41-1749
- Rhrustalev, L.N.**  
Determining the scope of engineering-geological research in permafrost regions [1986, p.27-38, rus] 41-2083  
Experience and prospects of using self-contained steam-heated cooling devices in construction on permafrost [1983, 12, rus] 41-2097
- Rhudiakov, G.I.**  
Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.1 [1986, 166p., rus] 41-3982  
Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.2 [1986, 166p., rus] 41-4060
- Rhucid, S.V.**  
Cloud physics and modification [1986, 113p., rus] 41-1447  
Improved sampler PLIAS-2 for capturing ice-forming nuclei on membrane filters [1986, p.76-80, rus] 41-1450  
Studying vertical distribution of ice-forming nuclei [1986, p.85-89, rus] 41-1452  
Suitability of stratiform clouds of the transition seasons for modification by crystallization agents to produce additional precipitation [1986, p.27-31, rus] 41-1448
- Rhvorost'ianov, V.I.**  
Numerical simulation of the artificial precipitation zone induced by seeding stratiform clouds with nucleating agents [1986, p.63-76, rus] 41-1902  
Two-dimensional time-dependent model of low clouds and fogs with account for dynamics, microphysics, radiation and ice phase [1984, p.625-628, eng] 41-4411
- Kick, W.J.**  
Glacier mapping for an inventory of the Indus drainage basin: current state and future possibilities [1986, p.102-105, eng] 41-749
- Kida, J.**  
Eolian processes in the Werenskiold, Nann and Torell glacier forefields (Wedel-Jarlsberg land, SW Spitsbergen) [1986, p.25-43, eng] 41-1550
- Kidera, T.**  
Study of fracture toughness of columnar grained ice using large specimens [1986, p.887-891, jpn] 41-2200
- Kies, D.**  
Silent warrior [1986, p.19-21, eng] 41-1840
- Kikuchi, K.**  
Experiments on aerosol scavenging by natural snow crystals. Pt.3. The effect of snow crystal charge on collection efficiency [1985, p.1127-1137, eng] 41-2569  
On the snow crystals of cold temperature types [1984, p.169-172, eng] 41-4384
- Kikuchi, R.**  
Extended lattice model of water; two-sublattice, two-orientation model [1982, p.124-142, eng] 41-2245
- Kikuchi, T.**  
Glaciological research program in east Queen Maud Land, East Antarctica, Part 5, 1985 [1987, 71p., eng] 41-3668
- Kikukawa, S.**  
New development in Japan's pavement management process [1987, p.917-948, eng] 41-4048
- Killeavy, M.S.**  
Determination of particle paths using the finite-element method [1986, p.219-223, eng] 41-681
- Killham, K.**  
Effect of freeze/thaw on gaseous nitrogen loss from upland soils [1986, p.86-91, eng] 41-1441
- Kim, N.S.**  
Investigation of ice-forming activity of aerosols of copper acetylacetonate in a supercooled two-phase flow [1986, p.21-24, eng] 41-3678
- Kim, V.Kh.**  
Heaving pressure of ground freezing in a limited space [1985, p.73-74, rus] 41-310
- Kimmerly, P.C.**  
Ice management procedures for specialized drilling structures [1986, p.764-791, eng] 41-2057
- Kimura, K.**  
Analysis of the freezing around a chilled pipe in darcy flow [1978, p.31-36, eng] 41-467
- Kimura, N.**  
Study of fracture toughness of columnar grained ice using large specimens [1986, p.887-891, jpn] 41-2200
- Kind, R.J.**  
Snowdrifting: a review of modelling methods [1986, p.217-228, eng] 41-1290
- King, E.L.**  
Regional iceberg scour distribution and variability on the eastern Canadian continental shelf [1986, p.172-181, eng] 41-3108
- King-Hele, S.**  
Mapping of Amery Ice Shelf, Antarctica, surface features by satellite altimetry [1987, p.183-188, eng] 41-4455
- King, L.**  
Zonation and ecology of high mountain permafrost in Scandinavia [1986, p.131-139, eng] 41-1871
- King, M.S.**  
Effect of the extent of freezing on seismic velocity in unconsolidated permafrost [1986, p.1285-1290, eng] 41-1213
- King, R.M.**  
Multi-basin avalanche simulation: a model [1986, p.35-47, eng] 41-1302
- King, W.D.**  
Air flow and particle trajectories around aircraft fuselages. IV: orientation of ice crystals [1986, p.433-439, eng] 41-3221  
Fluid flow and particle trajectories around simple bodies: impact of snowflakes on car windshields [1987, p.149-154, eng] 41-2762  
Thermal device for aircraft measurement of the solid water content of clouds [1986, p.356-362, eng] 41-3220
- Kingsbury, C.M.**  
Chemistry of a temperate pond's decaying winter cover [1984, p.139-142, eng] 41-1954  
Tests of new snow density samplers [1984, p.224-228, eng] 41-1964
- Kinney, T.C.**  
Influence of surface conditions on surface temperature [1986, p.1-15, eng] 41-640
- Kinoshita, S.**  
Experimental studies on reducing methods of uplift force to a steel pipe [1986, p.109-120, jpn] 41-3884  
In situ frost heaving test based on the segregation potential concept [1986, p.99-107, jpn] 41-3883  
Numerical analysis of frost heaving based upon the coupled heat and water flow model [1986, p.83-97, jpn] 41-3882
- Kinports, K.J.**  
Arctic ice impact assessment for naval surface combatants [1986, p.297-347, eng] 41-939
- Kinsella, E.D.**  
Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program [1986, 195p., eng] 41-3030
- Kipp, R.J.**  
Use and validation of cavity expansion load models in determining structural response of penetrators into ice targets [1986, p.481-493, eng] 41-2673
- Kirby, P.C.**  
Seasonal variation of soil erosion by water in southwestern Quebec [1987, p.55-63, eng] 41-2726
- Kirby, S.H.**  
Rheologies of H<sub>2</sub>O ices I(h), II, and III at high pressures: a progress report [1985, p.89-107, eng] 41-1699
- Kirchlechner, P.**  
Nomographs for the determination of meltwater from ice and snow surfaces by sensible and latent heat [1986, p.181-189, eng] 41-4357
- Kireev, I.V.**  
All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings [1986, 236p., rus] 41-702
- Kirkova, L.A.**  
Studies of horizontal composition of marginal vegetation in the Salair taiga [1986, p.22-28, rus] 41-2600
- Kirillova, L.A.**  
Using natural sorbents in removing oil spills from surfaces of northern seas [1986, p.181-183, rus] 41-2393
- Kirkeide, K.L.**  
Transportation of heavy modules to the Arctic [1986, p.1160-1168, eng] 41-1151
- Kiselev, I.U.G.**  
Sea-floor spreading in the Arctic Basin [1986, 224p., rus] 41-1748
- Kiselev, M.P.**  
Dynamics of freezing and thawing of ground around a cooled gas pipeline [1986, p.14-16, rus] 41-3206

- Kiselev, S.V.**  
Climate of the vegetational period during the formation of "ice-complex" deposits of the Omolon River (1987, p.113-119, rus) 41-3771
- Kiselev, V.A.**  
Preliminary results of calibrating airborne ice crystal counters (1986, p.99-107, rus) 41-1556
- Kishmisheva, I.K.**  
Snow runoff of the Transcaucasian highland (1985, p.545-547, rus) 41-1624
- Kishoni, D.**  
Measurement of the speed of sound in ice (1986, p.1713-1715, eng) 41-3071
- Kislav, A.V.**  
Spatial and temporal regularities of glacier fluctuations in the Eurasian Arctic (1986, p.120-125, 236-241, eng) 41-1066
- Kislav, B.V.**  
Experimental determination of water movement in the Firn layers of Abramov Glacier (1986, p.110-117, rus) 41-781
- Kitaoka, K.**  
Characteristics of the Yala Glacier from the viewpoint of tribie content (1986, p.11,841-11,844, eng) 41-1856
- Kitazawa, T.**  
Model tests on ice-rubble size and ship resistance in ice rubble (1986, p.229-243, eng) 41-1291
- Kluntsel', V.V.**  
Analyzing the relations among landscape indicators and the components of engineering-geological conditions (1986, p.118-121, rus) 41-1539
- Possibilities of the landscape-indication method for engineering-geological studies of northern West Siberia (1987, p.15-29, rus) 41-4621
- Kivakis, L.**  
Brittleness of reinforced concrete structures under arctic conditions (1986, 20p., eng) 41-213
- Durability of concrete under arctic offshore conditions (1987, p.935-946, eng) 41-3714
- Kivileva, N.M.**  
Increasing the safety of underground mining of perennially frozen placer deposits (1986, p.25-30, rus) 41-4551
- Kivisild, H.R.**  
Ship/ice interaction pressures and energies during ship ramming (1987, p.215-223, eng) 41-2424
- Kizim, A.G.**  
Field studies of mooring structures in the Far North (1986, p.82-85, rus) 41-904
- Field studies of the effect of year-round arctic navigation on mooring structures (1986, p.142-150, rus) 41-3457
- Klassen, R.A.**  
Acoustic survey and glacial history of Adams Lake, outer Nachvak Fiord, northern Labrador (1987, p.101-110, eng) 41-4011
- Ice flow history and glacial dispersal in the Labrador Trough (1987, p.61-71, eng) 41-4009
- Klavens, D.**  
Supralittoral, freshwater and terrestrial algal vegetation of Bouvetøya (1986, p.65-69, eng) 41-922
- Klein, K.**  
Design, development and deployment of instrument packages to monitor the motion of glacial ice masses at sea (1986, p.225-236, eng) 41-1594
- Improving the display of marine radar returns from first year sea ice (1986, 75p., eng) 41-244
- Klein, M.L.**  
Lattice vibrations and infrared absorption of ice Ih (1986, p.2414-2418, eng) 41-395
- Pressure-induced phase transformations in ice (1987, p.1672-1675, eng) 41-3645
- Kleiner, F.**  
Process for preparing gasified ice of improved stability (1983, 10 col., eng) 41-1770
- Kleminto, K.I.**  
Radio-echo sounding devices for measuring ice thickness on rivers, lakes and reservoirs (1986, p.134-138, rus) 41-122
- Klieger, P.**  
Fly ash and concrete durability (1987, p.1043-1069, eng) 41-3718
- Klimanov, V.A.**  
Influence of Late Pleistocene glaciation on the development of climate and vegetation in the coastal zone of central Primor'e (1986, p.157-161, rus) 41-126
- Klimova, G.K.**  
Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia (1986, p.36-41, rus) 41-2918
- Klimovskii, I.V.**  
Relation between the susceptibility of permafrost landscapes and topographic dissection (1986, p.113-121, rus) 41-3492
- Kline, J.T.**  
Preliminary evaluation of alluvial diamond discoveries in placer gravels of Crooked Creek, Circle District, Alaska (1987, 26p., eng) 41-2241
- Klinger, J.**  
Amorphous-crystalline phase transition and the light curve of comet P/Halley (1985, p.419-428, eng) 41-1716
- Composition and structure of the comet nucleus and its evolution on a periodic orbit (1985, p.407-417, eng) 41-1715
- Ices in the solar system; proceedings of the workshop, 1984 (1985, 954p., eng) 41-1693**
- Icy satellites, rings and Pluto (1985, p.621-629, eng) 41-1727**
- Klinger, L.F.**  
Aboveground-belowground phytomass ratios in Venezuelan paramo vegetation and their significance (1985, p.189-198, eng) 41-1229
- Kiluera, E.A.**  
Selection of optimal dimensions for hydraulic structures in ports (1986, p.77-81, rus) 41-1396
- Klockow, D.**  
Long-term record of H<sub>2</sub>O<sub>2</sub> in polar ice cores (1986, p.262-270, eng) 41-1756
- Klug, D.D.**  
Difference in energy between cubic and hexagonal ice (1986, p.7009-7010, eng) 41-188
- Direction of the dipole-moment derivative of the O-H stretching vibrations of coupled O-D—O-D pairs in H<sub>2</sub>O ice Ic (1987, p.7244-7245, eng) 41-3760
- Raman spectrum of high-density amorphous ice (1986, p.475-478, eng) 41-892
- Knapp, L.K.**  
Losses of explosives residues on disposable membrane filters (1987, 25p., eng) 41-3820
- Kniazheva, L.A.**  
Lichen flora in the fir-spruce forests on the eastern slopes of the central Sikhote Alin Mountains (1986, p.111-112, rus) 41-2779
- Knight, C.A.**  
Visual cloud histories related to first echo formation in northeast Colorado cumulus (1982, p.342-345, eng) 41-30
- Knight, N.C.**  
Frozen drop embryos in Alberta hailstorms and their origins (1984, p.253-255, eng) 41-4394
- Hail formation in an Oklahoma multicell storm (1982, p.427-430, eng) 41-49
- Hailstone shape factor and its relation to radar interpretation of hail (1986, p.1956-1958, eng) 41-4058
- Measurement and interpretation of hailstone density and terminal velocity (1982, p.442-445, eng) 41-53
- New clues for decoding hailstone structure (1982, p.446-449, eng) 41-54
- Wet growth of hailstones: integration of multiple doppler data and hailstone structure analysis in a kinematic model (1984, p.267-269, eng) 41-4397
- Knott, J.M.**  
Sediment transport characteristics of selected streams in the Susitna River basin, Alaska, October 1983 to September 1984 (1986, 73p., eng) 41-4323
- Knowles, R.**  
Nitrification: a significant cause of oxygen depletion under winter ice (1987, p.743-749, eng) 41-4229
- Knudsen, N.T.**  
Recent changes in a calving glacier, Austerdalsisen, Svartisen, Norway (1986, p.303-316, eng) 41-3562
- Recent changes of Nordbogenscher and Nodgletscher, Johan Dahl Land, South Greenland (1986, p.106-110, eng) 41-750
- Knutsson, S.**  
Stresses in the hydraulic backfill from analytical calculations and *in-situ* measurements (1981, p.261-268, eng) 41-790
- Kobayashi, D.**  
Snow accumulation on a narrow board (1987, p.239-245, eng) 41-3035
- Kobayashi, N.**  
Interaction of sea waves with discrete ice floes (1987, 88p., eng) 41-4601
- Thermoerosion of frozen sediment under wave action (1986, p.140-158, eng) 41-2016
- Kobayashi, S.**  
Experimental study on the initiation of blowing snow (1985, p.195-200, jpn) 41-4588
- Ice avalanches on Soler Glacier, Patagonia (1987, p.87-90, eng) 41-3831
- Influence of meteorological conditions on mass balance of glaciers of the Northern Patagonian ice field (1986, p.63-67, 188-191, eng) 41-1057
- Movement of a powder snow avalanche as recorded on a seismograph (1985, p.99-104, jpn) 41-4592
- On the powder snow avalanche, which occurred in Maseguchi, Nou-machi, Niigata Prefecture, 1986 (1986, p.87-91, jpn) 41-442
- On the powder snow avalanche which occurred in Shimamichi-kohsen, Nou-machi, Niigata Prefecture, 1986 (1986, p.168-170, jpn) 41-1221
- On the remnants of a powder snow avalanche which appeared during the snow melt season (1985, p.105-109, jpn) 41-4593
- Kobiakov, M.V.**  
Influence of paludification and the combustibility of stands on their development and productivity (1984, p.133-141, rus) 41-1083
- Kochavi, E.**  
Amorphous water ice and its ability to trap gases (1987, p.2427-2435, eng) 41-3575
- Kochtubajda, B.**  
Precipitation initiation through cloud seeding (1984, p.707-710, eng) 41-4412
- Kodakov, V.G.**  
Hydrologic investigations in the Mimer River basin (Spitsbergen) in 1983 (1986, p.161-166, rus) 41-127
- Kodama, Y.**  
Comparison of leaf and canopy reflectance of subarctic forests (1986, p.809-811, eng) 41-3848
- Wind and temperature regime along the slope of Adelie Land, Antarctica (1986, p.6735-6741, eng) 41-2141
- Koehler, P.E.**  
Safe speed of ships in Arctic waters (1986, p.734-746, eng) 41-2055
- Koerner, R.M.**  
Flow near an ice divide: analysis problems and data requirements (1986, p.171-174, eng) 41-763
- New method of using glaciers in monitoring climatic changes (1986, p.47-52, 175-179, eng) 41-1054
- On the special rheological properties of ancient microparticle-laden Northern Hemisphere ice as derived from bore-hole and core measurements (1986, p.501-510, eng) 41-4305
- Wisconsinan and pre-Wisconsinan ice thicknesses on Ellesmere Island, Canada: inferences from ice cores (1987, p.296-301, eng) 41-4079
- Kogodovskii, O.A.**  
Experience in building stone-earth-fill dams in the northern construction-climatic zone (1986, p.171-182, rus) 41-3460
- Structures of foundations designed for perennially frozen strongly deformable grounds (1986, p.29-32, rus) 41-2797
- Kogure, Y.**  
Ultrasonic attenuation and dislocation damping in crystals of ice (1986, p.3445-3461, eng) 41-2975
- Koh, G.**  
Extinction coefficient measurement in falling snow with a forward scatter meter (1987, 9p., eng) 41-3849
- Köhler, P.E.**  
Operation of ships in the Arctic (1986, p.553-562, eng) 41-1618
- Kohnen, H.**  
Operating experiences with the *Polarstern* in Antarctica (1986, p.548-562, eng) 41-2045
- Studying mass balance in the frontal zone of the Filchner-Ronne ice shelf, Antarctica (1986, p.136-139, 251-254, eng) 41-1069
- Kohno, H.**  
Recycling of pavement *in-situ* in Japan (1987, p.867-892, eng) 41-4046
- Kohonen, R.**  
Influence of moisture on heat transfer in structures (1987, 56p., fin) 41-3843
- Natural and forced convection in mineral fibre wall insulation (1986, 119p., fin) 41-2522
- Kohshima, S.**  
Formation of dirt layers and surface dust by micro-plant growth in Yala (Dakpatsen) Glacier, Nepal Himalayas (1987, p.63-68, eng) 41-3917
- Kolzumi, S.**  
Dielectric characteristics of snow in microwave frequency (1986, p.823-825, eng) 41-1467
- Kojima, K.**  
Ten questions and eight answers for problems of snow and ice (1986, p.159-167, jpn) 41-1220
- Ten questions and eight answers for problems of snow and ice (continued) (1987, p.19-26, jpn) 41-3755
- Kokawa, T.**  
Trial construction of 20-m span ice dome (1986, p.67-73, jpn) 41-439
- Kokkinowrachos, K.**  
Behaviour of ice masses in waves (1986, p.340-357, eng) 41-1105
- Kokko, E.**  
Natural and forced convection in mineral fibre wall insulation (1986, 119p., fin) 41-2522
- Kokovkin, A.V.**  
Water supply conditions and waste-water dilution in the far northeast European USSR during periods of low water levels in rivers (1986, p.57-67, rus) 41-1169
- Kolesnikov, I.U.M.**  
Calculating pile foundations for hydraulic structures (1986, 133p., rus) 41-1747
- Kolesnikov, S.F.**  
Climate of the vegetational period during the formation of "ice-complex" deposits of the Omolon River (1987, p.113-119, rus) 41-3771
- Kolev, S.**  
Influence of the complex permittivity of the water on radar studies of convective clouds (1984, p.793-796, eng) 41-4420
- Kollé, J.J.**  
Ice penetration drill/anchor using ultrahigh-pressure water-jets (1986, p.605-617, eng) 41-2679
- Kolmogorov, R.I.**  
Examples of dam construction in Siberia and the Far North (1973, p.53-62, rus) 41-1276

- Kolomiets, V.A.**  
Structural basis of snow-retention efficiency of forest strips [1986, p.94-97, rus] 41-3261
- Kolomytsev, I.S.**  
Combined methods of studying nival-glacial relief-forming processes in mountainous areas of the Baykal Amur railroad areas (Northern Transbaikal) [1986, p.82-86, rus] 41-3519
- Kolomytsev, V.A.**  
Interrelations between swamp development, waterlogging rate and relief forms in plains [1985, p.125-149, rus] 41-194
- Kolosova, N.V.**  
Homogeneity of series of mean monthly wind speed data for Soviet antarctic stations [1981, p.45-54, rus] 41-2012  
Surface wind velocity profiles in Antarctica [1981, p.55-62, rus] 41-2013
- Koltermann, K.P.**  
Large-scale oceanography in Fram Strait during the 1984 Marginal Ice Zone Experiment [1987, p.6719-6728, eng] 41-4232
- Kolymbas, D.**  
Ice forces on conical offshore structures [1987, p.217-231, eng] 41-3572
- Koma, N.**  
Design consideration of global ice load distribution and local ice pressure on offshore structure [1987, p.299-305, eng] 41-2436
- Komar, C.A.**  
Proceedings [1986, 241p., eng] 41-365
- Komarov, A.A.**  
Methods of building temporary structures from unconsolidated snow [1986, p.80-84, rus] 41-2158
- Komarov, A.V.**  
Determining some characteristics of fast and drifting ice with the meteorological radar-2 station [1985, p.66-70, rus] 41-3430
- Komiak, V.A.**  
Influence of the atmosphere and snow cover on the emissive properties of ice [1986, p.119-123, rus] 41-703
- Konchenko, L.A.**  
Cryogenic structure of the sedimentary mantle in southern central Yakut lowland [1986, p.60-65, rus] 41-2820
- Kondakov, V.V.**  
Field studies of stresses in freezing ground in the active layer [1986, p.163-169, rus] 41-2096  
Formation of cryogenic structure in freezing and thawing rocks in active layers of the Yamal Peninsula [1986, p.149-162, rus] 41-2095
- Kondakova, O.A.**  
Compressive deformation of frozen saline soils [1985, p.99-100, rus] 41-324
- Kondo, H.**  
Characteristics of precipitation and vertical structure of air temperature in the northern Patagonia [1987, p.15-23, eng] 41-3823  
Ice core drilling operations in the Northern Patagonia Icefield [1987, p.151-155, eng] 41-3840
- Kondo, J.**  
Parameterization of critical wind speed to cause drifting snow [1987, p.67-73, jpn] 41-4321
- Kondrashkin, A.V.**  
Geophysical research for the construction of hydraulic structures in permafrost areas [1986, p.76-83, rus] 41-3449
- Kondrat'ev, K.I.A.**  
Large lakes as ocean-simulating models [1986, 63p., rus] 41-2362  
Planet Venus [1987, 278p., rus] 41-3689  
Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan [1986, p.21-23, eng] 41-2941
- Kondrat'ev, P.S.**  
Remote sounding and interpretation of cryo-hydro-geochemical anomalies [1986, p.133-144, rus] 41-3494
- Kondrat'eva, K.A.**  
Prognostic geocryological mapping at the regional and the design research stages [1986, p.38-45, rus] 41-2084  
Publication of the monograph *Geocryology of the USSR* and the geocryological map of the USSR, scale 1:2 500 000 [1986, p.212-217, rus] 41-2103
- Kondratov, A.B.**  
Influence of temperature of the medium on technological properties of carbamide resins used in the injection-strengthening of rocks [1986, p.29-33, rus] 41-3767
- Kong, J.A.**  
Active and passive remote sensing of ice. Semi-annual report (1 Feb 84-31 July 84) [1984, 14p. + figs., eng] 41-1763  
Remote sensing of snow-covered ice [1986, p.4.5.1-4.5.4, eng] 41-97
- Konishchev, V.N.**  
Mineralogy and morphology of disperse moraine debris on King George and Nelson islands [1984, p.104-110, rus] 41-2358
- Kono, H.**  
Present situation and evaluation of *in-situ* surface and base recycling [1987, p.773-811, eng] 41-4043
- Kononenko, A.V.**  
Hydrothermal regime of taiga and tundra soils of northeastern Europe [1986, 145p. + inserts, rus] 41-3246
- Konovalov, A.A.**  
Air-convection cooling devices [1983, p.71-77, rus] 41-4476  
Computation of maximum permafrost temperatures in beds beneath buildings [1986, p.192-197, eng] 41-4366  
Quantitative approximation of temperature and time dependence of frozen ground strength [1986, p.74-84, rus] 41-3396
- Konovalov, V.G.**  
Forecasting glacial runoff in river basins of Central Asia [1986, p.75-78, 187-191, rus] 41-4344  
Regional methods of calculating mean summer air temperature and the annual course of global radiation in Central Asia [1986, p.71-80, rus] 41-777
- Konrad, J.M.**  
Internal stresses in frozen ground: Discussion [1986, p.408-410, eng] 41-1162  
Procedure for determining the segregation potential of freezing soils [1987, p.51-58, eng] 41-4537
- Konstantinov, A.R.**  
Improving the method of calculating constituents of the heat balance of the soil surface [1986, p.62-66, eng] 41-3679
- Konstantinov, I.P.**  
Accumulation and preservation of massive artificial sea ice [1986, p.167-172, rus] 41-2172
- Konstantinov, P.I.A.**  
Relation between the susceptibility of permafrost landscapes and topographic dissection [1986, p.113-121, rus] 41-3492
- Konstantinov, V.D.**  
Regime of soil-ground waters and runoff in forests and swamps of the Yenisey River area of western Siberia [1986, p.14-22, rus] 41-3209  
Using satellites in mapping West Siberian forests [1986, p.34-43, rus] 41-3515
- Konstantinova, N.A.**  
Bryophyta in the Polar-Alpine Botanical Garden [1986, p.8-12, rus] 41-2776
- Konstantinova, R.G.**  
Flood water stresses on the protective hydraulic structures of Leningrad [1985, p.88-91, rus] 41-430
- Kopple, R.V.**  
Wintertime wet and dry deposition in northern Michigan [1986, p.1171-1178, eng] 41-796
- Korchagin, E.A.**  
Welded groove-and-tongue profiles for high strength bulwarks [1986, p.26-28, rus] 41-1534
- Kordenbrock, J.U.**  
Overview of the Cold Weather Program [1986, p.61-82, eng] 41-925
- Koreisha, M.M.**  
Glaciers, subglacial taliks and perennially frozen rocks [1986, p.206-219, rus] 41-2842  
Recent glaciation of the Pekul'ney Range [1986, p.128-130, rus] 41-1653
- Korelskaia, G.V.**  
Interactions between artificial water bodies and permafrost and the development of exogenic processes in reservoir zones [1986, p.120-127, rus] 41-2092
- Korenev, V.G.**  
Results of studying avalanches in the Magadan region [1986, p.63-72, rus] 41-2650
- Korgemagi, P.**  
Performance of high ratio recycled pavements in northern Ontario [1987, p.829-865, eng] 41-4045
- Korhonen, C.**  
Brittleness of reinforced concrete structures under arctic conditions [1986, 20p., eng] 41-213  
Roof blisters. Physical fitness building, Fort Lee, Virginia [1986, 15p., eng] 41-2611
- Koriakin, B.V.**  
Subway construction under severe climatic conditions [1986, p.15-17, rus] 41-1532
- Koriakin, V.S.**  
Decrease in glacier cover on the islands of the Eurasian Arctic during the 20th Century [1986, p.157-165, eng] 41-2342  
Seven expeditions to Spitsbergen [1986, 176p., rus] 41-4124  
Snow accumulation at the alimentation-limit altitude of Spitsbergen glaciers [1986, p.90-93, rus] 41-1644  
Spatial and temporal regularities of glacier fluctuations in the Eurasian Arctic [1986, p.120-125, 236-241, eng] 41-1066
- Körner, H.**  
Rock avalanches in Huascarán Mountain, Peru [1985, p.233-247, ger] 41-720
- Kornev, K.G.**  
Dynamics of ice-rock barriers under conditions of freezing of filtering rocks [1987, p.981-986, eng] 41-3242
- Korobkov, A.A.**  
Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae—Leguminosae. Part 2. Family Leguminosae [1986, 188p., rus] 41-2361  
Botanical and geographic observations in lower reaches of the Enmyvaam River (Anadyr' River basin) [1986, p.450-459, rus] 41-989
- Korobov, G.I.**  
Distributing device 110 kv with mobile reel-carriage switches [1986, p.9-10, rus] 41-912
- Koroleva, T.V.**  
Conditions conducive to glacial mudflow in the Aktru River valley, Altai Mountains, June 24, 1984 [1986, p.121-124, rus] 41-1651
- Koronelli, T.V.**  
Basic methods and principal results of studying the role of physical, chemical and biologic factors in the cleaning of Arctic waters and ice from petroleum hydrocarbons [1986, p.171-173, rus] 41-2390
- Koropachinskii, I.I.U.**  
All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks, Novosibirsk, Aug. 26-28, 1986. Summaries [1986, 165p., rus] 41-2456  
Botanical studies in Siberian preservation parks [1986, p.85-88, rus] 41-2458
- Korotae, V.N.**  
Geomorphology of river deltas on the Arctic coast of Siberia [1986, p.139-147, eng] 41-2340
- Koroteev, D.V.**  
Construction of foundations of low-rise buildings and structures on sagging ground [1986, 155p. (pertinent p. 80-135), rus] 41-784
- Korotin, M.M.**  
Concrete with A.C.F. admixture for transportation engineering [1986, 63p., rus] 41-3803
- Korotkevich, E.S.**  
Antarctic ice sheet studies: results and plans [1984, p.79-85, rus] 41-2356  
Natural associations of the Arctic and their protection [1986, 120p., rus] 41-3860  
Twenty-fourth Soviet Antarctic Expedition. General description of studies of the 1978/79 season, with research results [1986, 139p., rus] 41-1263
- Korotkov, V.E.**  
Calculating the non-erosive velocity of a stream for sandy ground in freezing weather [1986, p.74-77, rus] 41-3260
- Korovitsyn, L.F.**  
Tractive power of walking all-terrain vehicles designed for swamps [1987, p.22-24, rus] 41-3984
- Korppoo, S.**  
Method for comparing and optimizing Arctic offshore structures [1986, p.624-632, eng] 41-1121
- Korsunov, V.M.**  
Biologic activity of forest soils [1985, 122p., rus] 41-4109
- Korytnyi, L.M.**  
Hydrologic investigations of landscapes [1986, 208p., rus] 41-1365
- Kosaki, M.**  
Ice as capacitor dielectric [1985, p.539-542, eng] 41-3349
- Kosarev, A.L.**  
On the microstructure and ice water content of high clouds [1984, p.73-76, eng] 41-4375
- Kosenko, A.A.**  
Foundations built of dry cemented earth mixtures [1985, p.4-5, rus] 41-506
- Koshelenko, I.V.**  
Forecasting fog dissipation time and visibility improvement with stratus conditions [1986, p.50-58, rus] 41-2637
- Koshev, A.N.**  
Selection of optimal dimensions for hydraulic structures in ports [1986, p.77-81, rus] 41-1396
- Koshevol, A.A.**  
Automated navigational aids for icebreaking cargo ships [1987, p.20-22, rus] 41-2785
- Koshinskii, S.D.**  
Space models of high-velocity winds and low air temperatures in the boundary layer [1986, p.90-107, rus] 41-1972
- Koshio, A.**  
Measurements of the snow fraction in a snow/water mixture flow in a pipe [1986, p.2156-2160, eng] 41-3407
- Koskikivi, J.**  
Long-term measurements of ice induced loads on the propulsion machinery of product tanker *Sotka* [1985, 71p. + append., eng] 41-4598
- Koslowski, G.**  
Ice in the winter 1985/86 in the coastal area between the Ems and Trave Rivers [1986, p.207-215, ger] 41-3558
- Kosobrodov, I.U.A.**  
Drilling bits for hard rocks [1986, p.61-65, rus] 41-4499
- Kostalyndina, N.K.**  
Topographic analysis of the lower Kolyma River for cryolithologic mapping [1986, p.51-60, rus] 41-2819
- Kostetskai, E.V.**  
Studying the possibility of estimating the frost heave of clayey grounds according to their swelling [1985, p.76-78, rus] 41-312
- Kostilainen, V.**  
Arctic offshore—a challenge to the technical sciences [1986, p.4-7, eng] 41-84  
Problems in physical modelling of the propulsion and manoeuvring of ice transiting ships [1986, p.323-331, eng] 41-1602

- Koetnikov, V.D.**  
Hydraulic construction in ports and engineering research in coastal zones of seas [1986, 169p., rus] 41-2709
- Kostko, O.K.**  
Lidar-radiometric method for determining the ice water content of cirrus clouds [1986, p.32-38, eng] 41-3251
- Kostyria, G.Z.**  
Concretes with polyfunctional admixtures [1985, p.13-17, rus] 41-416
- Kotenko, A.N.**  
Automation and powering of loading-unloading equipment [1986, 128p., rus] 41-2227
- Kotliakov, V.M.**  
Annotated list of Soviet literature on glaciology for 1982 [1986, p.199-228, rus] 41-1668  
Glaciologists of the Academy of Sciences of the USSR for the front [1986, p.19-25, rus] 41-1819  
Main results of mapping glacio-nival systems for the World Atlas of Snow and Ice Resources [1986, p.111-116, eng] 41-751  
Problem of glacier mass balance and its significance for glaciology [1986, p.4-8, 140-144, eng] 41-1046  
Prospects for utilizing snow-ice resources [1986, p.140-144, rus] 41-1656  
Radio echo-sounding of sub-polar glaciers in Svalbard: some problems and results of Soviet studies [1987, p.151-159, eng] 41-4450  
Snow and ice in Earth's environment [1986, 157p., rus] 41-698  
Some results and prospects for studying mass balance of glaciers (according to materials of a Hamburg seminar in 1983) [1986, p.179-193, rus] 41-1666  
Soviet glaciological studies in 1985 [1986, p.3-10, rus] 41-1632
- Kotliarskii, M.**  
Arctic runs of the Balts [1986, p.12-13, rus] 41-435
- Kotor, A.N.**  
Characteristics of granulometric composition of Late Pleistocene deposits in the Ledovyy Obryv outcrop [1986, p.200-206, rus] 41-2841  
Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka) [1986, p.114-120, rus] 41-2091  
Pseudomorphs of wedge ice in the Mayn River valley (Central Chukotskiy Peninsula) [1986, p.54-62, rus] 41-2544
- Kotor, N.K.**  
Automatic control system for diesel ventilation aggregates of air-cushion vehicles [1987, p.38-39, rus] 41-3392
- Kotova, O.P.**  
Two-dimensional time-dependent model of low clouds and fogs with account for dynamics, microphysics, radiation and ice phase [1984, p.625-628, eng] 41-4411
- Kotsulbinskaya, T.A.**  
Structural heat-engineering for road pavements [1986, 149p., rus] 41-2210
- Kotte, G.**  
Units and vehicles for spreading de-icing agents [1986, p.12-16, eng] 41-2326
- Kottmeier, C.**  
Meteorological research using a high mast on an antarctic shelf [1987, p.5-10, eng] 41-2844
- Kottmeier, S.T.**  
Ecology of sea-ice microbial communities during the 1984 winter-to-summer transition in McMurdo Sound, Antarctica [1985, p.128-130, eng] 41-2956  
Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover [1987, p.153-164, eng] 41-3131  
Sea ice microbial communities. 8. Bacterial production in annual sea ice of McMurdo Sound, Antarctica [1987, p.175-186, eng] 41-3133
- Kotts, A.N.**  
Influence of sub-zero temperatures on the performance of rubber shock-absorbers [1986, p.95-98, rus] 41-2711
- Kotuby-Amacher, J.**  
Retention and release of metals by soils—evaluation of several models [1986, p.131-154, eng] 41-2138
- Koubsky, P.**  
Asphalt overlay on the Granville bridge [1986, p.132-139, eng] 41-2203
- Koutaniemi, L.**  
Factors controlling ground frost on an aapa mire in Kuusamo, Finland [1986, p.60-67, fin] 41-187  
Role of ground frost, snow cover, ice break-up and flooding in the fluvial processes of the Oulanka River, NE Finland [1984, p.127-161, eng] 41-265
- Kovachev, D.**  
Influence of the complex permittivity of the water on radar studies of convective clouds [1984, p.793-796, eng] 41-4420
- Kovacs, A.**  
Chemical fractionation of brine in the McMurdo Ice Shelf, Antarctica [1986, p.307-313, eng] 41-4281  
Electromagnetic property trends in sea ice, Part 1 [1987, 45p., eng] 41-4368  
Modeling the electromagnetic property trends in sea ice and example impulse radar and frequency-domain electromagnetic ice thickness sounding results [1986, p.57-133, eng] 41-2655  
Sea ice and the Fairway Rock icefoot [1985, p.25-32, eng] 41-337
- Koval', P.N.**  
Reinforced concrete plating for bridge reconstructions [1985, p.5-7, rus] 41-507
- Koval'chik, I.A.P.**  
Reinforced concrete plating for bridge reconstructions [1985, p.5-7, rus] 41-507
- Kovalev, A.D.**  
New data on the position of the Bellingshausen Ice Shelf [1986, p.227-231, eng] 41-3202
- Kovalev, R.V.**  
Humus formation in ecosystems affected by industrial activities [1986, 165p., rus] 41-2912
- Kovalev, V.N.**  
Increasing the efficiency of fleet performance on the Kolyma route [1985, p.54-56, rus] 41-490
- Kovalevskii, A.L.**  
Biogeochemical exploration for mineral deposits in forest lands and taiga [1986, p.32-37, rus] 41-199
- Koval'kov, V.P.**  
Impulse method of describing non-equilibrium cryogenic physical-geological processes [1986, p.101-115, rus] 41-603  
Physical geocryology [1986, 177p., rus] 41-2885  
Regularities governing the development of forms of artificially frozen zones obtained by seasonally active freezing devices [1983, p.58-71, rus] 41-4475
- Kovda, V.A.**  
Cryosphere and the zonality of soil melioration processes [1986, p.94-98, rus] 41-4468  
One hundred years of genetic pedology [1986, 276p., rus] 41-521  
Progress in pedology. Contributions of Soviet pedologists to the 13th International Congress of Pedologists, Hamburg, 1986 [1986, 270p., rus] 41-1743
- Kover, D.**  
Northern latitude logistic support [1986, p.435-438, eng] 41-945
- Koverda, V.P.**  
Nucleation and growth of crystals in amorphous layers of water, heavy water and organic substances [1985, p.30-43, rus] 41-553
- Kowa, M.W.**  
Determination of ice crystal growth parameters in a new supercooled cloud tunnel [1982, p.325-328, eng] 41-25
- Kozakova, N.F.**  
Fir trees [1986, 238p., rus] 41-2259
- Kozhaev, D.A.**  
Short-wave radiation balance and heat flux in soil on the northern slopes of Central Caucasus. Alpine Meteorological Experiment (AL'PEX) [1985, p.66-75, rus] 41-1039
- Kozitskii, I.E.**  
Mechanism of breakup of the ice cover of rivers and canals [1982, p.70-82, eng] 41-1442
- Kozlov, G.S.**  
Improved drainage and frost action criteria for New Jersey pavement design. Volume 3—Road subsurface drainage design, construction and maintenance guide for pavements [1984, 150p., eng] 41-4579
- Kozlov, V.D.**  
Improving the efficiency of geochemical exploration methods in taiga (8th Session of the Siberian branch of SGPM) summaries of reports [1986, 240p., rus] 41-197
- Kozlova, M.P.**  
Protection of shallow foundations from flooding [1985, p.43-45, rus] 41-296
- Kozlova, V.K.**  
Interaction of polymer admixtures with cements in concretes [1986, p.59-62, rus] 41-2756
- Kozlovskaya, L.S.**  
Decomposition of wood litter on felled areas of the North [1986, p.92-107, rus] 41-2378  
Silvicultural and ecologic consequences of felling in Karelian forests [1986, 198p., rus] 41-2373
- Kozlovskaya, R.T.**  
Ice adhesion to structural materials and covers and multi-component anti-icing systems [1982, p.96-101, rus] 41-1274
- Kozlovskii, A.M.**  
Unloading of a large tanker near Mirnyy Station [1985, p.116-119, rus] 41-1267
- Kozo, T.L.**  
Mesoscale nowcasting of sea ice movement through the Bering Strait with a description of major driving forces [1987, p.193-207, eng] 41-3079  
Modeling winds and open-water buoy drift along the eastern Beaufort Sea coast, including the effects of the Brooks Range [1986, p.13,011-13,032, eng] 41-1860
- Kozyrev, V.K.**  
Marine transportation of liquefied gases [1986, 206p., rus] 41-2872
- Kozyreva, M.P.**  
Comparative specification of engineering thermometers for low temperatures [1986, p.259-262, eng] 41-1407
- Krakovskii, M.B.**  
Service life of flexible elements subject to freeze-thaw cycles [1986, p.19-20, rus] 41-3207
- Krakovski, E.**  
Integrated ice monitoring system for Arctic offshore drilling [1986, p.107-118, eng] 41-1093
- Krasavin, A.N.**  
Heat release during agitated water movement near the ice surface [1985, p.14-16, rus] 41-1816  
Heat transfer from waves impacting on ice surface [1986, p.58-62, eng] 41-1854
- Kraschuk, L.S.**  
Primary production in the Bratsk reservoir. Part 2. Assimilation of carbon by phytoplankton [1986, p.50-58, rus] 41-1834
- Krasnennikova, A.I.A.**  
Efficiency of producing and using lightweight concretes for construction in the Murmansk region [1986, p.62-67, rus] 41-4557
- Krasnikova, T.I.**  
Experiments with joint action of vermiculite-based sorbents and the Barents Sea strains of petroleum oxydizing bacteria [1986, p.178-180, rus] 41-2391
- Krasnopolin, I.I.A.**  
Squid-based picovoltmeter for measuring resistance of metals at low temperatures and volt-ampere characteristics of superconductor structures [1986, p.1427-1431, eng] 41-994
- Krasnov, I.U.N.**  
Experience in ice dam construction [1986, p.177-183, rus] 41-2174  
Experience in producing fragments of water-raising hydraulic structures built of ice [1986, p.161-171, rus] 41-3459
- Krasovitskii, B.A.**  
Dynamics of the freezing over of underground pipes [1987, p.1331-1337, eng] 41-4162
- Krasovskaya, T.M.**  
Possible ways of transfer of atmospheric pollutants into the Arctic and their accumulation areas in snow and ice [1986, p.93-96, rus] 41-1645
- Krasovskii, N.N.**  
All-Union tutorial seminar on mathematical modeling in science and technology. Summaries [1986, 333p., rus] 41-2381
- Krass, M.S.**  
Dynamics and thermal regime of glaciers [1986, p.34-39, 152-157, rus] 41-4337  
Mathematical model and forecasts of thermokarst evolution [1986, p.45-49, rus] 41-1636  
Model calculation of glacial evolution [1984, p.86-103, rus] 41-2357  
Numeric modeling of evolution of the Greenland ice sheet [1984, p.892-903, eng] 41-2074  
Origin of some buried ice forms in the Yamal tundra [1986, p.66-75, rus] 41-1793  
Role of debris cover in the thermal physics of glaciers [1986, p.255-266, eng] 41-687  
Theory of radiative-conductive mechanism of subsurface heating and melting of snow and ice [1986, p.27-38, rus] 41-1634
- Krutschmer, W.**  
Measurement of the extinction of water ice particles [1985, p.149-154, eng] 41-1702
- Krauss, T.W.**  
Examination of double-plate ice crystals and the initiation of precipitation in continental cumulus clouds [1987, p.1331-1349, eng] 41-4424
- Kravchenko, I.U.F.**  
Improving the performance of ripper-equipped bulldozers under conditions of Siberia and the North [1987, p.26-27, rus] 41-4122
- Kravchenko, S.M.**  
Classifying frozen ground according to abrasion power [1982, p.8-14, rus] 41-3545
- Kravchenko, V.V.**  
Peculiarities of water balance structure in different landscapes of Priangar'e [1986, p.187-193, rus] 41-1375  
Role of naleds in the formation of river winter drainage and ice cover in the western BAM zone [1986, p.34-84, rus] 41-423
- Kravtsova, V.I.**  
Main results of mapping glacio-nival systems for the World Atlas of Snow and Ice Resources [1986, p.111-116, eng] 41-751  
Methods of forest interpretation on texture-selective images [1986, p.55-66, rus] 41-2304
- Krebs, W.N.**  
Ice diatom floras, Arthur Harbor, Antarctica [1987, p.163-171, eng] 41-3427
- Krenke, A.N.**  
Analysis and computation of regimes of major mountain glacier systems [1986, p.4-9, 125-130, rus] 41-4332  
Glacier systems in the Soviet northeast [1980, p.166-185, eng] 41-2343  
Snow accumulation at the alimentation-limit altitude of Spitsbergen glaciers [1986, p.90-93, rus] 41-1644
- Kretov, V.A.**  
Efficient construction of road pavements for the Tiumen' region [1986, p.10-12, rus] 41-509
- Krichevskii, A.P.**  
Slag-pumice concrete for industrial construction [1986, 84p. (Pertinent p.70-84), rus] 41-3022

- Krimmel, R.M.**  
Using sequential photography to estimate ice velocity at the terminus of Columbia Glacier, Alaska [1986, p.117-123, eng] **41-752**  
Velocity and surface altitude of the lower part of Hubbard Glacier, Alaska, August 1978 [1986, 13p., eng] **41-3227**
- Krishna Murthy, M.V.**  
Outward phase change in a cylindrical annulus with circumferential fins [1986, p.1773-1779, eng] **41-3295**
- Krissek, L.A.**  
Modern sediments of the Terra Nova Bay polynya, Ross Sea, Antarctica [1985, p.107-108, eng] **41-2949**
- Kristmannsdóttir, H.**  
Grímsvötn geothermal area, Vatnajökull, Iceland [1984, p.25-50, eng] **41-590**
- Kritauk, L.N.**  
Compilation of a regional geocryological forecast based on small-scale maps of natural complexes in the cryolithozone of western Siberia [1986, p.53-67, rus] **41-3486**  
Isotope composition of ground ice on the Yamal Peninsula [1985, p.142-143, rus] **41-3537**  
Using stable isotopes in studying ground ice [1986, p.92-97, rus] **41-112**
- Kriuchkov, V.V.**  
Bioindications of natural environments in the North [1987, p.60-67, rus] **41-4568**  
Economic development of natural resources in the North and trends in changes of ecosystems [1985, p.76-83, rus] **41-3438**
- Kriuchkova, G.A.**  
Quantitative estimation of changes in physiognomy of the Upper Kolyma basin induced by industrial activities [1986, p.9-13, rus] **41-4467**
- Kriukov, A.P.**  
High-vacuum seal for low temperatures [1987, p.950-951, eng] **41-3158**
- Krivolutskii, D.A.**  
Environmental impact of industrial undertakings [1987, 320p., rus] **41-4567**
- Krivosogova, N.F.**  
Engineering and geological conditions of construction and operation of hydraulic structures built on perennially frozen hard rocks [1986, p.34-44, rus] **41-3444**  
Influence of geocryological conditions of the construction site on the design of the Vilyuy Hydroelectric Power Plant No.3 [1986, p.53-55, rus] **41-987**
- Krivorotov, A.P.**  
Distribution of stresses and strains in sandy bases of rigid stamps [1985, p.100-103, rus] **41-325**
- Krocker, R.E.**  
Control and method for defrosting a heat pump outdoor heat exchanger [1982, 14 col., eng] **41-1993**
- Kroh, J.**  
Pulse radiolysis study of electrons in frozen alkaline solutions [1986, p.275-283, eng] **41-2811**
- Krokeborg, J.**  
Frost insulation in rock tunnels [1986, p.15-18, eng] **41-2261**
- Kronfellner-Kraus, G.**  
Current problems on avalanche research in France, Japan and Austria [1984, p.151-154, ger] **41-710**  
Mountain collapse and rock sliding from Mount Saint Helens [1985, p.227-232, ger] **41-719**
- Kronik, I.A.A.**  
Basic achievements and problems of engineering geocryology in construction and operation of hydraulic structures [1986, p.23-29, rus] **41-3442**
- Kropfli, R.A.**  
Cloud particle identification near the melting layer with dual polarization K-band doppler radar [1982, p.412-415, eng] **41-46**
- Kropotkin, P.N.**  
Methodical and experimental bases of geothermy [1983, 230p. (Pertinent p.79-84, 181-187), rus] **41-4614**
- Krotov, S.A.**  
Ice movement velocity at localized water-level drops above spillway outlets [1986, p.71-74, rus] **41-1395**
- Krouse, H.R.**  
Arctic ice shelf growth, fiord oceanography and climate [1984, p.147-153, eng] **41-631**
- Krushvili, I.G.**  
Indicators of the state of ultimate balance of a mudflow mass [1985, p.373-376, rus] **41-1625**
- Krug, C.C.**  
Snow thrower with dual controls [1983, 4 col., eng] **41-1774**
- Krupenlo, N.N.**  
Planet Venus [1987, 278p., rus] **41-3689**
- Krushlinskii, V.I.**  
Urban planning and construction problems in Siberia [1986, p.40-45, rus] **41-3259**
- Krutasova, L.V.**  
Distribution of stresses and strains in sandy bases of rigid stamps [1985, p.100-103, rus] **41-325**
- Krutsikh, B.A.**  
International symbols for marine ice maps and nomenclature of marine ice [1986, 45p., rus] **41-1896**
- Krylov, G.V.**  
Fir trees [1986, 238p., rus] **41-2259**  
Operation of power equipment of gas pipelines in western Siberia [1987, 143p., rus] **41-3687**
- Krysov, S.V.**  
Decelerating force due to flexural and gravitational waves radiated by a load moving on ice [1985, p.385-387, rus] **41-2329**
- Kryzhanovskii, S.A.**  
Using the UBM-20A assembly for drilling large-diameter wells in permafrost [1986, p.24-27, rus] **41-2533**
- Kubo, H.**  
Investigation of preparation for thermal cracking in asphalt pavements [1987, p.493-510, eng] **41-4033**
- Kucherenko, V.E.**  
Radiation and heat regime of some high-mountain biogeocenoses [1986, p.66-86, rus] **41-2880**
- Kucheravskii, F.I.**  
Blasting work in ground and rocks [1986, 128p., rus] **41-2903**
- Kuchment, L.S.**  
Remote sensing in the study of elements of moisture supply to geosystems [1986, 113p., rus] **41-2732**
- Kudin, M.V.**  
Influence of pine, spruce and black alder forests on the formation of snow cover [1987, p.15-18, rus] **41-4171**
- Kudinov, V.A.**  
Ultrasonic tests of grouting quality in concrete dams [1986, p.33-36, rus] **41-1922**
- Kudoiarov, L.I.**  
Prospects and problems of hydraulic power construction in the North [1986, p.5-12, rus] **41-3440**  
Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000 [1986, p.13-23, rus] **41-3441**
- Kudriashov, B.B.**  
Borehole gas sampler for determining absolute age of ice by carbon isotope analysis [1984, p.72-78, rus] **41-2355**
- Kudriashov, V.G.**  
Southern boundary of permafrost distribution within the West Siberian Plain [1986, p.106-113, rus] **41-3776**
- Kudriashov, V.I.**  
Bridge piers without grillage under complicated natural conditions [1987, p.16-17, rus] **41-2793**
- Kudriavtsev, E.A.**  
Determining the thermal conductivity coefficient for thawed and frozen grounds [1983, p.20-24, rus] **41-4483**
- Kudriavtseva, N.N.**  
Buried soils of northeastern Yakutia (the Khallerchinskaya tundra) [1986, p.109-120, rus] **41-2354**
- Kudriavtseva, S.K.**  
Study of turbulent transfer in stratiform clouds and artificial crystallization zones [1984, p.719-722, eng] **41-4413**
- Kugno, V.S.**  
Using short pyramidal piles with intermediate sand-cushions in weak ground [1985, p.20-21, rus] **41-283**
- Kuhn, M.**  
Meteorological conditions of glacier mass balance extremes [1986, p.15-19, 149-153, eng] **41-1048**  
Micro-meteorological conditions for snow melt [1987, p.24-26, eng] **41-3592**
- Kuittinen, R.**  
Determination of areal snow-water equivalent values using satellite imagery and aircraft gamma-ray spectrometry [1986, p.181-189, eng] **41-3896**  
Mapping of snow-cover parameters by a spaceborne microwave radiometer [1986, p.209-214, eng] **41-3899**
- Kujala, P.**  
Long-term measurements of ice induced loads on the propulsion machinery of product tanker *Sotka* [1985, 71p. + append., eng] **41-4598**  
Results and statistical analysis of ice load measurements on board icebreaker *Sisu* in winters 1979 to 1985 [1986, 52p. + append., eng] **41-2336**
- Kukhalashvili, E.G.**  
Dynamic loads of high density mudflow mass on transverse structures [1985, p.356-360, rus] **41-1623**  
Indicators of the state of ultimate balance of a mudflow mass [1985, p.373-376, rus] **41-1625**
- Kulagina, N.A.**  
Single-phase Stefan problem accounting for the movement of a medium in liquid phase [1985, p.36-49, rus] **41-2350**
- Kulakov, I.I.U.**  
Peculiarities of ice movement in the Arctic Basin according to data of the FGGE automatic buoys [1986, p.77-88, rus] **41-4199**  
Study of ice movement in the Arctic Ocean by means of the FGGE automatic buoys [1986, p.96-103, rus] **41-4202**
- Kuleev, M.T.**  
Reaction of loess soils with hydrofluosilicic acid and carbamide resins [1986, p.53-57, rus] **41-601**
- Kuliev, A.N.**  
New and rare species of higher aquatic and hydrophilic plants in eastern Bol'shezemel'skaya tundra [1986, p.1619-1620, rus] **41-3024**
- Kulikov, A.I.**  
Frost fissures and their importance for soil genesis [1986, p.41-44, eng] **41-993**
- Physical properties and regimes of meadow-chernozem cryogenic soils of the Buryat SSR [1986, 137p., rus] **41-1045**  
Thermal properties of cryogenic meadow-chernozem soils in the Buryat ASSR [1984, p.126-130, rus] **41-4090**
- Kulikov, I.U.A.**  
Efficiency of using foam plastics as hydro-thermoinsulative materials for electrical heating plants [1986, p.17-18, rus] **41-2795**
- Kulikov, I.U.N.**  
Numerical expression of runoff formation models for simple catchment areas, based on remote sensing data [1986, p.30-36, rus] **41-2734**  
Remote sensing in the study of elements of moisture supply to geosystems [1986, 113p., rus] **41-2732**  
Remote sensing techniques in studying structure of radiation-heat flows and moisture content of geosystems in relation to monitoring the water component [1986, p.97-105, rus] **41-2736**
- Kulkarni, R.**  
Life cycle costing of paved Alaskan highways. Volume 1 [1982, 76p., eng] **41-4069**
- Kumagai, S.**  
Investigation of preparation for thermal cracking in asphalt pavements [1987, p.493-510, eng] **41-4033**
- Kumai, M.**  
Chemical properties of snow in the northeastern United States [1987, p.(C1)625-(C1)630, eng] **41-3959**
- Kung, S.K.J.**  
Heat and moisture transfer in a partly frozen nonheaving soil [1986, p.1114-1122, eng] **41-2474**
- Kuntsevich, S.P.**  
Geophysical research for the construction of hydraulic structures in permafrost areas [1986, p.76-83, rus] **41-3449**
- Kuperman, A.M.**  
Towing gear of arctic icebreakers [1985, p.14-16, rus] **41-3351**
- Kuperman, V.L.**  
Hydraulic power construction in the North [1987, 304p., rus] **41-3013**
- Kupin, A.N.**  
Dust control in coal quarries at subzero temperatures [1985, p.153-154, rus] **41-2774**
- Kurakina, N.K.**  
Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia [1986, p.36-41, rus] **41-2918**
- Kuralenko, N.P.**  
Sedimentation at the foot of volcanoes in various climatic settings [1986, 111p., rus] **41-2363**
- Kurfurst, P.J.**  
Cone penetration tests of the nearshore zone sediments off Richards Island, Northwest Territories [1987, p.939-944, eng] **41-4018**
- Kurida, T.**  
Reports of several international and domestic symposia [1986, p.93-112, jpn] **41-443**
- Kurillo, S.V.**  
Calculating pile foundations for hydraulic structures [1986, 133p., rus] **41-1747**
- Kuriyama, H.**  
Characteristics of the casualties due to snow in the snowy areas [1986, p.79-94, jpn] **41-81**  
Vane shear strength of snow (2)—Effects of the shape and the size of vane on the vane shear strength of snow [1986, p.133-140, jpn] **41-1217**
- Kurochkin, I.U.N.**  
Peculiarities of the wind regime over the Golubin glacier in the ablation period [1986, p.170-174, rus] **41-129**
- Kurochkin, V.V.**  
Radioactive isotope method of controlling earth density during roadbed construction [1986, p.11-12, rus] **41-437**
- Kushnir, I.N.**  
Foundation construction in complex engineering-geological conditions in Finland [1985, p.42-43, rus] **41-295**
- Kuskov, V.V.**  
Vertical electrical soundings in the vicinity of extended taliks [1986, p.172-180, rus] **41-2098**
- Kuskovskii, V.S.**  
Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau [1987, p.4-65, rus] **41-3650**  
Use of water resources and the formation of water-reservoir shores in Siberia [1986, p.3-7, rus] **41-811**
- Kusumoto, S.**  
Fracture toughness and macrofractography of single crystal ice [1986, p.107-112, jpn] **41-2187**  
Fracture toughness of single crystal ice and columnar grained ice [1985, p.19-27, jpn] **41-2186**  
Study of fracture toughness of columnar grained ice using large specimens [1986, p.887-891, jpn] **41-2200**
- Kutter, M.**  
Studies on the residual effects of de-icing salts [1986, p.5-12, ger] **41-2325**
- Kuusisto, E.**  
Winter and summer low flows in Finland [1986, p.31-38, eng] **41-535**



- Kuzin, I.I.**  
On errors in the geological interpretation of space images of West Siberia [1984, p.436-442, eng] 41-820
- Kuzivanova, S.V.**  
Bioindication of vegetation disturbance from drilling oil wells in the Bol'shezemel'skaya Tundra [1986, p.94-103, rus] 41-1172
- Kuz'menko, V.V.**  
Mechanized laying of communication cables under difficult conditions [1987, 161p., rus] 41-3609
- Kuz'min, G.P.**  
Recommendations for the design and construction of geocryogenic coolers [1986, 66p., rus] 41-3329
- Kuz'min, G.V.**  
Alfiora of the lower Yama River (Magadan Region) [1986, p.513-521, rus] 41-991
- Kuz'min, V.R.**  
Calculating frost resistance of structural elements [1986, 145p., rus] 41-1985  
Calculating frost resistance of structural elements [1985, p.95-102, rus] 41-2852
- Kuz'mina, N.P.**  
Drift ice as a tracer in water circulation studies of marginal seas [1984, p.20-32, eng] 41-818
- Kuznetsov, A.I.**  
Welded groove-and-tongue profiles for high strength bulwarks [1986, p.26-28, rus] 41-1534
- Kuznetsov, G.I.**  
Cryogenic processes and the stability of tailing-dumps built on permafrost bases [1986, p.67-75, rus] 41-3448  
Using frozen ground in the construction of dams in the northern construction-climatic zone [1986, p.128-141, rus] 41-3456
- Kuznetsov, I.M.**  
Studying anomalously high ice drift velocities in Arctic seas [1986, p.57-60, eng] 41-1691
- Kuznetsov, M.P.**  
Engineering protection of mountainous regions from dangerous glacial processes [1986, p.102-104, 214-216, rus] 41-4350
- Kuznetsov, V.S.**  
Corrosion resistance of steel cores of earth dams and ways of its improvement [1985, p.63-68, rus] 41-434  
Temperature regime of rocks surrounding underground excavations of the Kolyma Hydroelectric Power Plant [1985, p.26-29, rus] 41-429
- Kuznetsova, I.L.**  
Regional regularities governing long range freeze-thaw of ground due to economic development of northwestern Siberia [1986, p.176-183, rus] 41-2838  
Zonal peculiarities of long-range frost heave manifestations in northwestern Siberia [1986, p.116-123, rus] 41-2827
- Kuznetsova, L.F.**  
Studying the effect of ground conditions on strength and stability of no-pilework bridge supports exposed to moving ice [1987, p.101-104, rus] 41-3792
- Kvartskhava, K.K.**  
Using stress transducers in predicting frost resistance of concrete [1985, p.85-88, rus] 41-1622
- Kvasha, V.G.**  
Reinforced concrete plating for bridge reconstructions [1985, p.5-7, rus] 41-507
- Kvashnin, G.P.**  
Technology of opening and completion of water-bearing layers [1987, 247p. (Pertinent p.128-138), rus] 41-3666
- Kvon, I.A.D.**  
Methods of calculating snow transfer volumes in artificial snow accumulation during snowstorms [1986, p.155-160, rus] 41-1660  
Snow as construction material (bibliographic review of Russian and foreign publications) [1986, p.95-105, rus] 41-2162
- Kytin, I.U.A.**  
Electrical impulse method of determining the strength of frozen ground and ice [1982, p.108-113, rus] 41-1275
- La Rocca, A.J.**  
Handbook of the statistics of various terrain and water (ice) backgrounds from selected U.S. locations [1980, 785p., eng] 41-1853
- Laasanen, O.**  
Program of collecting data of ice jams [1986, p.39-43, eng] 41-536
- Labeyrie, L.D.**  
Melting history of Antarctica during the past 60,000 years [1986, p.701-706, eng] 41-616
- Lachenbruch, A.H.**  
Changing climate: geothermal evidence from permafrost in the Alaskan Arctic [1986, p.689-696, eng] 41-1254
- Lackinger, B.**  
Avalanche measuring sites and the avalanche measuring station on Innsbruck Nordkette [1986, p.79-87, ger] 41-3528  
Snow and avalanche research at the Institute of Soil Mechanics, Rock Mechanics and Ground Engineering of the University of Innsbruck: 1. Research on slab avalanches; 2. Soil and rock mechanics in relation to avalanche defense structures [1984, p.155-173, ger] 41-711
- Lackinger, G.**  
Use of microcomputer system for snow slide measurements [1985, p.223-226, ger] 41-718
- Ladanyi, B.**  
Derivation of engineering properties of permafrost from the cone penetration test [1986, p.24-33, eng] 41-2511  
Resistance of frozen ground to steady cone or pile penetration [1987, p.125-132, eng] 41-2413  
Use of the borehole dilatometer stress-relaxation test for determining the creep properties of ice [1987, p.253-259, eng] 41-2429
- LaFleche, P.T.**  
Ground probing radar in the investigation of the competency of frozen tailings pond dams [1987, p.191-197, eng] 41-4012
- Lafleur, P.**  
Energy balance modelling of snowmelt in a suburban environment: a progress report [1984, p.204-208, eng] 41-1961
- Lagerloef, G.S.E.**  
1984-1985 current observations in the East Greenland Current: a preliminary description [1986, p.41-53, eng] 41-3058
- Laird, C.M.**  
Nitrate deposition in Antarctica: temporal and spatial variations [1986, 268p., eng] 41-3155  
Nitrate flux on the Ross Ice Shelf, Antarctica, and its relation to solar cosmic rays [1986, p.1264-1267, eng] 41-2019  
Nitrate variability in South Pole and Ross Ice Shelf snow and firn [1985, p.68-69, eng] 41-2629
- Laiterä, J.**  
Arctic class hopper dredges [1986, p.988-1000, eng] 41-1142
- Lak, G.Ts.**  
Types of landscapes in the Karelian ASSR [1985, p.4-16, rus] 41-190
- Lakhtina, O.V.**  
Development of Holocene peat hummocks in northwestern Siberia [1986, p.123-128, rus] 41-2828  
Influence of neotectonics on the development of cryogenic formations [1986, p.103-115, rus] 41-2826
- Laktionov, A.G.**  
Use of ground generators of ice-forming aerosols in works on artificial enhancement of precipitation in mountain regions [1982, p.68-73, eng] 41-1007
- Lal, D.**  
In situ H-3, C-14, and Be-10 for determining the net accumulation and ablation rates for ice sheets [1987, p.4947-4952, eng] 41-3343
- Lal, W.A.M.**  
Mathematical model for river ice [1987, p.141-146, eng] 41-4221
- Lalande, H.**  
Speciation of aluminum in different compartments of a drainage basin during snowmelt [1985, p.58-68, eng] 41-1485  
Temporal variation in aluminum speciation and concentration during snowmelt [1986, p.231-237, eng] 41-2620
- Lam, I.**  
Measurements at 38 GHz of low-angle fading along satellite-earth paths in the Canadian Arctic [1986, 20p., eng] 41-4605
- Lam, I.P.**  
Design of gravity structures under iceberg loading [1987, p.55-62, eng] 41-2402
- Lamb, D.**  
Glaciating characteristics of Montana and Florida summer cumuli: Comparisons based on observations and modeling [1982, p.374-377, eng] 41-38  
Measurement of the entrapment of sulfur dioxide by rim ice [1987, p.1765-1772, eng] 41-4538  
Preliminary measurements of SO<sub>2</sub> adsorbed on ice [1986, p.349-351, eng] 41-865
- Lambert, G.**  
Long-range transport of continental radon in subantarctic and antarctic areas [1986, p.178-189, eng] 41-1750
- Lamin, L.A.**  
Stability of protective forest strips in northern Kulunda [1985, p.79-87, rus] 41-3981
- Lammasniemi, J.**  
Infrared measurement of free-water content and grain size of snow [1987, p.342-348, eng] 41-3780
- Lamson, C.**  
Ocean development and management in the Arctic: issues in American and Canadian relations [1986, p.327-337, eng] 41-2724
- Land reclamation under permafrost conditions**  
Land reclamation under permafrost conditions [1984, p.19-24, rus] 41-4484
- Landa, M.L.**  
New methods of determining ice and wind loads during icing [1986, p.37-38, rus] 41-1923
- Lande, R.**  
Quantitative genetic analysis of morphological variation in an antarctic diatom grown at two light intensities [1987, p.42-54, eng] 41-3997
- Landsberger, S.**  
Abnormally enriched elemental concentrations in urban snow [1985, p.255-261, eng] 41-1501
- Landva, J.**  
Controlling factors of ice-created seabed features related to production systems in Canadian cold oceans [1986, p.565-582, eng] 41-1118
- Lane, D.**  
Laboratory evaluation of the freezing and thawing durability of marine limestone coarse aggregate in concrete [1987, p.1311-1323, eng] 41-3728
- Lang, T.E.**  
Comparison of experimental and computer modeling of snow-block impact on structures [1986, p.321-324, eng] 41-4283
- Lange, M.**  
Studying mass balance in the frontal zone of the Filchner-Ronne ice shelf, Antarctica [1986, p.136-139, 251-254, eng] 41-1069
- Lange, M.A.**  
Impact experiments in low-temperature ice [1987, p.506-518, eng] 41-4177  
Numerical models of the Filchner-Ronne Ice Shelf: an assessment of reinterpreted ice thickness distributions [1986, p.10,457-10,462, eng] 41-1022  
Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea [1987, p.57-74, eng] 41-3274
- Langhorne, P.J.**  
Alignment of crystals in sea ice due to fluid motion [1986, p.197-214, eng] 41-1289
- Langley, K.**  
Objective reconstructions of the late Wisconsinan Laurentide ice sheet and the significance of deformable beds [1985, p.229-238, eng] 41-2760
- Langseth, R.L.**  
Huzzahs for city's snowfighting program [1986, p.64-65, eng] 41-2701
- Langway, C.C., Jr.**  
Changes in precipitation chemistry at Dye-3, Greenland [1986, p.9849-9855, eng] 41-1021
- Lannoy, H. de**  
Winter serviceability in PIARC member countries [1986, p.35-48, eng] 41-2487
- Lanzarotti, L.J.**  
Laboratory studies of ion irradiations of water, sulfur dioxide, and methane ices [1985, p.317-335, eng] 41-1710
- LaPotin, P.J.**  
Description of the building materials data base for Cincinnati, Ohio [1986, 85p., eng] 41-3498  
Description of the building materials data base for Portland, Maine [1986, 83p., eng] 41-662
- Lapp, D.**  
Level ice physical properties in support of the M.V. Arctic performance trials in Baffin Bay and Admiralty Inlet, May-June 1986 [1986, 89p. + appends., eng] 41-3363
- Lapp, D.J.**  
Ice data management for support of offshore operations [1986, p.195-222, eng] 41-2275
- Lapshin, V.I.A.**  
Measuring instruments IPG-3 and IDMG-1 for frost heaving of ground [1985, p.105, rus] 41-327
- Laptev, M.N.**  
Dangerous glacial slope processes in mountain ecosystems of Siberia [1986, p.63-65, rus] 41-4065  
Satellite methods of studying conditions for avalanche formation in the East Siberian mountains [1986, p.43-49, rus] 41-3516
- Lapteva, N.I.**  
Dangerous glacial slope processes in mountain ecosystems of Siberia [1986, p.63-65, rus] 41-4065  
Satellite methods of studying conditions for avalanche formation in the East Siberian mountains [1986, p.43-49, rus] 41-3516
- Lara, P.**  
Structural monitoring concepts for arctic pipelines [1986, p.47-66, eng] 41-643
- La-ionov, V.P.**  
Electric arc welding under northern conditions [1986, 256p., rus] 41-3511  
Working fitness and durability of equipment in the North [1985, p.5-13, rus] 41-2847
- Laroche, B.**  
Canadian Beaufort Sea 1984 repetitive mapping of ice scour [1986, 43p. + appends. + maps, eng] 41-1566
- Larouche, M.C.F.**  
Device for detecting and preventing the formation of ice on contoured surfaces [1985, 6 col. + 3 sheets, eng] 41-2499
- Larsen, J.**  
Sea ice modelling in the East Greenland area [1986, p.147-156, eng] 41-1590
- Larsen, O.D.**  
Interaction between submerged embankment and multi-year ice floes [1986, p.678-692, eng] 41-1124
- Larsen, U.**  
Glass freezing as kinetics time scale singularity of new significance [1986, p.248-253, eng] 41-1621

- Larson, D.B.**  
Behavior of saline ice under explosive loading and its application in understanding rigid body penetration of sea ice [1986, p.365-384, eng] 41-2666
- Larson, R.W.**  
MIZEX 84 ice surface measurements from the FS *Polarstern* [1986, p.30-40, eng] 41-3057
- Larsson, B.**  
High resolution pulse doppler radar for detection of small icebergs in Arctic sea routes [1986, p.358-363, eng] 41-1106
- Lary, J.A.**  
Investigation of seasonal load restrictions in Washington State [1985, p.58-67, eng] 41-609
- Laskova, L.M.**  
Decomposition of wood litter on felled areas of the North [1986, p.92-107, rus] 41-2378
- Laskov, V.**  
MV *Robert LeMeur* ice/propeller interaction project: full-scale data [1986, p.301-319, eng] 41-2285
- Latalin, D.A.**  
Calculating temperature regime of artificial ice-bearing earth structures by the finite elements method [1986, p.166-168, rus] 41-2836  
Optimization of layer-by-layer artificial build-up of ice [1986, p.222-225, rus] 41-139
- Latini, A.**  
Analysis of snow cover distribution over the Italian Alps in connection with different weather types and upper-air currents [1986, p.53-63, ita] 41-867  
Distribution of snowstorms over the Italian Alps and weather types [1986, p.8-19, ita] 41-2233
- Latta, J.K.**  
Unforgiving North [1985, p.157-164, eng] 41-3191
- Lau, Y.L.**  
Low-temperature effects on flow in sand-bed streams [1987, p.111-115, eng] 41-2067
- Lauffer, D.**  
Amorphous water ice and its ability to trap gases [1987, p.2427-2435, eng] 41-3575
- Laughlin, J.L.**  
Compressive strength of ice containing a bimodal distribution of grain sizes [1987, p.167-172, eng] 41-2418  
Effect of a bimodal grain size distribution on the compressive strength of polycrystalline ice [1986, p.17p., eng] 41-2131
- Launila, J.**  
Adhesive strength of spray accreted ice on materials and coatings [1986, p.484-496, eng] 41-1114
- Lauriol, B.**  
Residual snow cover in the Canadian Arctic in July: a means to evaluate the regional maximum snow depth in winter [1986, p.309-315, eng] 41-2689
- Lautridou, J.P.**  
Experimental frost shattering of some precambrian rocks, Finland [1986, p.89-100, eng] 41-1847
- Lavole, Y.**  
Mechanical properties of atmospheric ice [1986, p.67-74, eng] 41-1305
- Lavrov, S.A.**  
Experimental methods of determining water permeability of frozen soils [1986, p.56-62, rus] 41-3588  
Numerical evaluation of the effect of hydrometeorological factors on the formation of water reserves in soil [1986, p.46-56, rus] 41-3587
- Lawler, D.M.**  
River bank erosion and the influence of frost: a statistical examination [1986, p.227-242, eng] 41-4365
- Lawrence, D.E.**  
Thermodynamics and mechanics of freezing soil around a pipeline [1986, p.111p., eng] 41-3364
- Lawrence, J.R.**  
Use of contrasting D/H ratios of snows and groundwaters of eastern New York State in watershed evaluation [1987, p.519-521, eng] 41-3310
- Lawson, D.E.**  
Glaciers and sediment [1986, p.53-69, eng] 41-474  
Ice problems associated with rivers and reservoirs [1986, p.70-98, eng] 41-475  
Morphology, hydraulics and sediment transport of an ice-covered river. Field techniques and initial data [1986, p.37p., eng] 41-2612  
Response of permafrost terrain to disturbance: a synthesis of observations from northern Alaska, U.S.A. [1986, p.1-7, eng] 41-1183
- Lawson, M.P.**  
Tree-ring analysis of movement of a rock-glacier complex on Mount Mestas, Colorado, U.S.A. [1984, p.299-309, eng] 41-1232
- Layman, R.**  
Scattering at mm wavelengths from *in situ* snow [1986, p.161-162, eng] 41-95
- Lazareva, I.P.**  
Clear-felling impact on properties of sandy podzols in northern Karelia [1986, p.61-79, rus] 41-2376
- Lazzarotti, G.**  
Winter maintenance of highways [1987, p.20-22, ita] 41-3308
- Leaf, C.F.**  
Satellite data input to Windy Gap computerized streamflow forecasting model [1986, p.349-354, eng] 41-3905
- Lean, D.R.S.**  
Nitrification: a significant cause of oxygen depletion under winter ice [1987, p.743-749, eng] 41-4229
- Leavitt, E.**  
Advanced radar systems for support of Arctic marine operations [1986, p.839-858, eng] 41-2061  
Integrated ice monitoring system for Arctic offshore drilling [1986, p.107-118, eng] 41-1093
- Lebedenko, I.U.P.**  
Field studies of stresses in freezing ground in the active layer [1986, p.163-169, rus] 41-2096  
Formation of cryogenic structure in freezing and thawing rocks in active layers of the Yamal Peninsula [1986, p.149-162, rus] 41-2095  
Methods of classifying frost-heave parameters for compiling a map of rock-heave types [1986, p.83-96, rus] 41-2824  
Thermodynamics and kinetics of cryogenic deformation of pore-space structure in water saturated disperse rocks [1987, p.50-63, rus] 41-4622
- Lebedev, A.A.**  
Ice balance and ice resources of the world ocean [1986, p.112-118, rus] 41-117  
Ice balance of the world's oceans and the ice resources involved [1986, p.322-330, eng] 41-3624
- Lebedev, A.B.**  
Effect of external turbulence on heat and mass transfer in boundary layers [1985, p.1-8, eng] 41-1005
- Lebedev, M.P.**  
Prospects for using gas-thermal methods of strengthening and rebuilding details of equipment designed for the North [1985, p.116-119, rus] 41-2853
- LeBlanc, J.**  
They tow icebergs [1987, p.2-7, eng] 41-3530
- Leblond, P.H.**  
Wave growth in scattered sea-ice [1987, p.257-266, eng] 41-3167
- Lecourt, E.J., Jr.**  
Considerations for propellers and propulsion plants operating in northern latitudes [1986, p.175-182, eng] 41-931
- Ledford-Hoffman, P.A.**  
Biogenic-silica accumulation in the Ross Sea and the importance of antarctic continental-shelf deposits in the marine silica budget [1986, p.2099-2110, eng] 41-458
- Ledialkina, N.A.**  
Carbon dioxide gas exchange components of tundra plants at various temperatures [1986, p.1067-1073, rus] 41-1455
- Lednicer, D.A.**  
Correlation of icing relationships with airfoil and rotorcraft icing data [1986, p.737-743, eng] 41-802
- LeDrew, E.F.**  
Role of local heat sources in synoptic activity within the Polar Basin [1984, p.309-327, eng] 41-4534
- Lee, G.C.**  
Cold region structural engineering [1986, 529p., eng] 41-338
- Lee, H.**  
Cold climate performance of Canadian airport pavements [1987, p.303-332, eng] 41-4027
- Lee, J.**  
Vessel transit through ridged ice [1987, p.307-312, eng] 41-2437
- Lee, L.H.N.**  
On fracture mechanics in lifting an ice sheet [1985, p.189-197, eng] 41-1359
- Lee, M.**  
Image-analysis techniques for determination of morphology and kinematics in Arctic sea ice [1987, p.92-96, eng] 41-4442
- Lee, R.W.**  
Strength and ductility of ice under tension [1985, 20p., eng] 41-1679
- Lee, Y.**  
Temperature distribution and heat transfer during curing processes of large scale concrete structures [1987, p.113-118, eng] 41-2411
- Lees, D.C.**  
Fate and effects of drilling fluids and cuttings discharges in lower Cook Inlet, Alaska, and on Georges Bank [1984, p.1-388, eng] 41-1782
- Lefèvre, R.**  
Investigation by analytical transmission electron microscopy of individual insoluble microparticles from antarctic (Dome C) ice core samples [1986, p.250-261, eng] 41-1755
- Legendre, L.**  
Nutrient limitation of the bottom-ice microalga biomass (southeastern Hudson Bay, Canadian Arctic) [1986, p.969-982, eng] 41-1473  
Sea-ice microalgae to test the hypothesis of photosynthetic adaptation to high frequency light fluctuations [1986, p.321-326, eng] 41-1554
- Legrand, M.**  
220-year continuous record of volcanic H<sub>2</sub>SO<sub>4</sub> in the antarctic ice sheet [1987, p.671-676, eng] 41-4325
- Legrand, M.R.**  
Relative contributions of tropospheric and stratospheric sources to nitrate in antarctic snow [1986, p.236-249, eng] 41-1754
- Lehmus, E.**  
Field measurements of the adhesion strength of ice [1986, p.725-734, eng] 41-1128  
Ice forces on model Arctic structures [1986, p.693-706, eng] 41-1125
- Lehr, P.J.**  
Bibliography of alpine and subalpine areas of the Front Range, Colorado [1986, 114p., eng] 41-697
- Leishavili, G.R.**  
Caterpillar and wheeled hauling-tractors [1986, 295p., rus] 41-1688
- Leibman, M.O.**  
Classifier of cryogenic rock-heave [1986, p.97-103, rus] 41-2825  
Topographic analysis of the lower Kolyma River for cryolithologic mapping [1986, p.51-60, rus] 41-2819
- Leibovich, A.S.**  
Concretes for high dams [1985, 101p., rus] 41-413  
Increasing the safety of energy-producing structures under dynamic loading [1985, 113p., rus] 41-426  
State of stress and thermal stresses in concretes and reinforced concretes of hydraulic structures [1985, 104p., rus] 41-428
- Leibundgut, C.**  
Winter dye tracer experiments on the Findelengletscher (Canton Wallis, Switzerland) [1986, p.33-41, eng] 41-3524
- Leiby, J.**  
R/V *Polar Duke*--a new vessel for antarctic research support [1985, p.437-440, eng] 41-224
- Leiva, J.C.**  
1985 surge and ice dam of Glaciar Grande del Nevado del Plomo, Argentina [1987, p.131-132, eng] 41-3607  
Glacier mass balances in the Cajon del Rubio, Andes Centrales Argentinas [1986, p.83-90, eng] 41-1307
- Leivo, M.**  
Durability of concrete under arctic offshore conditions [1987, p.935-946, eng] 41-3714
- Leksakova, V.D.**  
Maximum river runoff in the Angara basin [1987, 132p., rus] 41-4108
- LeMasurier, W.E.**  
Re-interpretation of glaciovolcanic interaction at Mount Takah and Mount Murphy, Marie Byrd Land, Antarctica [1985, p.57-59, eng] 41-2624
- Lemieux, G.**  
Hudson River ice management [1985, p.96-110, eng] 41-1488
- Lemieux, G.E.**  
Natural rotor icing on Mount Washington, New Hampshire [1986, 62p., eng] 41-3480
- Lemke, P.**  
Stochastic description of atmosphere-sea ice-ocean interaction [1986, p.785-823, eng] 41-2999
- Lemon, R.**  
Lagoon treatment of municipal sewage effluent in a subarctic region of Canada (Yellowknife, N.W.T.) [1986, p.129-139, eng] 41-350
- Lenkova, L.A.**  
Influence of morainal mantle on the formation of turbidity of glacial waters [1986, p.123-128, rus] 41-783
- Lenzano, L.E.**  
1985 surge and ice dam of Glaciar Grande del Nevado del Plomo, Argentina [1987, p.131-132, eng] 41-3607  
Glacier mass balances in the Cajon del Rubio, Andes Centrales Argentinas [1986, p.83-90, eng] 41-1307
- Leonard, E.M.**  
Use of lacustrine sedimentary sequences as indicators of Holocene glacial history, Banff National Park, Alberta, Canada [1986, p.218-231, eng] 41-1191
- Leonova, N.E.**  
Winter migration of soil water in the Devitsa River basin [1985, p.90-104, rus] 41-2731
- Leppäranta, M.**  
Ice information systems for marine operations [1986, p.57-70, eng] 41-1090  
Mesoscale sea ice deformation in the East Greenland marginal ice zone [1987, p.7060-7070, eng] 41-4261  
On estimating ice stress from MIZEX 83 ice deformation and current measurements [1986, p.17-19, eng] 41-3055  
Role of floe collisions in sea ice rheology [1987, p.7085-7096, eng] 41-4263
- Leppävuori, M.**  
Maintenance measures and road safety [1983, p.262-266, fin] 41-1934
- Leshchiner, V.B.**  
Classifying frozen ground according to abrasion power [1982, p.8-14, rus] 41-3545
- Leskov, M.**  
To change the tactics of ship pilotage in ice [1987, p.30-31, rus] 41-3613
- Leslie, L.D.**  
Snow loads in Alaska [1987, 42p., eng] 41-3423

- Letreugilly, A.**  
Glacier mass balance reconstructions for the Northern Hemisphere covering this century and their climatic significance [1986, p.20-25, 153-157, eng] 41-1049  
Mass-balance measurements: problems and two new methods of determining variations [1986, p.446-454, eng] 41-4300
- Leung, H.K.N.**  
Subglacial drainage for an ice sheet resting upon a layered deformable bed [1987, p.4935-4946, eng] 41-3342
- Leung, S.C.**  
Applications of a method for evaluation of low temperature tensile properties of asphalt concrete [1987, p.333-366, eng] 41-4028  
Development of a method to evaluate the low temperature tensile properties of asphalt concrete [1986, p.156-189, eng] 41-2204
- Leutheusser, H.J.**  
Oil slicks in ice covered rivers [1985, p.369-379, eng] 41-3471
- Levachev, S.N.**  
Calculating pile foundations for hydraulic structures [1986, 133p., rus] 41-1747
- Levadnina, G.D.**  
Benthos in the experimental bays of the Ob' River below Novosibirsk [1985, p.66-72, rus] 41-1832
- Levanov, B.I.**  
Transportation of petroleum products during the extended and winter navigation seasons [1986, p.61-66, rus] 41-2915
- Levchenko, A.B.**  
Analysis of oil pollution in arctic seas, using biotechnological methods [1986, p.180-181, rus] 41-2392
- Leventer, A.R.**  
Vertical sediment flux beneath annual sea ice, McMurdo Sound, Antarctica [1985, p.109-111, eng] 41-2950
- Lever, J.**  
Iceberg dynamics of the DIGS experiment [1986, p.138-142, eng] 41-3103
- Lever, J.H.**  
Design, development and deployment of instrument packages to monitor the motion of glacial ice masses at sea [1986, p.225-236, eng] 41-1594  
Iceberg splitting and its implications for deterioration modelling [1986, p.429-440, eng] 41-158  
On the splitting of icebergs—natural and induced [1987, p.379-385, eng] 41-2446
- Levi, L.**  
Annealing effects on the hailstone structure [1984, p.271-274, eng] 41-4398  
Crystal structure of ice accreted on an ice substrate [1987, p.120-122, eng] 41-3604  
Density of accreted ice [1986, p.1081-1090, eng] 41-1476  
Ice accretions on fixed cylinders [1986, p.1091-1109, eng] 41-1477  
Numerical simulation of hail embryo growth [1984, p.505-508, eng] 41-4406
- Leviakov, M.**  
Quarter of a century on ice watch [1985, p.20-21, eng] 41-2938
- Levin, B.M.**  
Technical operation of ship propulsion plants Collection of works [1986, 120p., rus] 41-3383  
Working conditions of power transmissions of ice-navigating ships [1986, p.3-8, rus] 41-3386
- Levin, H.L.**  
Antenna deicing apparatus [1981, 6 col. + 3 sheets, eng] 41-2369
- Levine, M.D.**  
Observations of internal gravity waves under the Arctic pack ice [1987, p.779-782, eng] 41-2327
- Levinskii, B.V.**  
Scientific basis for the processes of upbuilding frozen water-ice foams on ground and their practical application [1986, p.66-72, rus] 41-2155
- Levitsky, W.**  
Measurement and maintenance of runway friction at Canadian airfields [1987, p.949-979, eng] 41-4049
- Levizzani, V.**  
Ice accretions on fixed cylinders [1986, p.1091-1109, eng] 41-1477  
Theoretical and wind tunnel study of the melting behavior of small and large spherical ice particles [1982, p.388-391, eng] 41-42
- Levkovich, A.I.**  
Discussion on topics of engineering-geological investigations of permafrost [1987, p.120, rus] 41-4623
- Levy, E.M.**  
Background levels of petroleum residues in the Canadian Arctic marine environment [1986, p.161-169, eng] 41-352
- Levy, G.**  
Three-dimensional simulation of Florida convective clouds—Sensitivity to cloud microphysical processes [1982, p.358-361, eng] 41-34
- Lew, J.K.**  
Cloud tunnel study on the riming of snowflakes and a theoretical investigation on the capture efficiency of ice crystals by large cloud drops [1986, 346p., eng] 41-2643  
Wind tunnel investigation of the riming of model ice crystal aggregates [1984, p.151-155, eng] 41-4380  
Wind tunnel investigation on the riming of snowflakes, Parts 1 and 2 [1986, p.2392-2417, eng] 41-2360
- Lewis, C.F.M.**  
Design of an iceberg scour repetitive mapping network for the Canadian East Coast [1987, 45p. + maps, eng] 41-3225  
Dynamics of Iceberg Grounding and Scouring (DIGS) experiment [1986, p.129-131, eng] 41-3101  
Ice scour and seabed engineering: proceedings of a Workshop on Ice Scour Research [1986, 322p., eng] 41-3086  
Iceberg scouring: hazard for seabed development [1986, p.1020-1021, eng] 41-3173  
Iceberg scouring rate studies, Grand Banks of Newfoundland [1987, p.825-833, eng] 41-4013  
Numerical model for calculating spatial distribution and mean frequency of iceberg grounding events [1986, p.221-232, eng] 41-3114
- Lewis, E.L.**  
Ice pumps and their rates [1986, p.11756-11762, eng] 41-1024
- Lewis, E.O.**  
Detection of sea-ice features using K(a)-band radar [1985, p.499-500, eng] 41-1409
- Lewis, J.E.**  
Some physical properties of snowcover on evolving first year sea ice [1985, p.84-95, eng] 41-1487
- Lewis, J.K.**  
Role of sea ice motion in ice penetration [1986, p.135-153, eng] 41-2656
- Lewis, J.W.**  
Method to verify the presence of a trend in studying spatial variability of soil temperature [1986, p.1122-1127, eng] 41-2475
- Lewis, T.W.**  
Sediment transport characteristics of selected streams in the Susitna River basin, Alaska, October 1983 to September 1984 [1986, 73p., eng] 41-4323
- Lewkowicz, A.G.**  
Rate of short-term ablation of exposed ground ice, Banks Island, Northwest Territories, Canada [1986, p.511-519, eng] 41-4306  
Use of an ablatometer to measure short-term ablation of exposed ground ice [1985, p.1767-1773, eng] 41-1241
- Li, B.**  
Identification of phytoplankton pigments in inshore water near Davis Station, Antarctica [1986, p.110-115, chi] 41-403
- Li, H.**  
Modeling of BOD-DO dynamics in an ice-covered river in northern China [1987, p.247-251, eng] 41-3967  
Paleoglacial traces and series of multiglaciation in the Luojishan Mountain [1986, p.107-118, chi] 41-1458
- Li, J.**  
Where are the former glacial relics in Guilin area [1986, p.97-106, chi] 41-1457
- Li, J.C.-C.**  
Dynamic properties of frozen granular soils [1979, 335p., eng] 41-897
- Li, P.**  
Recent trends in the potential role of seasonal snow cover in the CO<sub>2</sub> induced climate change [1986, p.176-178, chi] 41-1466
- Li, R.**  
Ice algae in sea ice near Davis Station, Antarctica [1986, p.66-71, chi] 41-401
- Li, S.**  
Component decomposition model for evaluating atmospheric effects in remote sensing [1986, 151p., eng] 41-2585  
Perennially frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation [1986, p.66-78, rus] 41-2541  
Permafrost and periglacial phenomena in West Kunlun Mountains of China [1987, p.103-109, eng] 41-3921  
Permafrost rocks of the Tsinkhai-Sizan plateau of Tibet and their formation conditions [1986, p.68-79, eng] 41-3017
- Li, T.**  
Probabilistic analysis of sea ice in North Bohai Bay [1987, p.387-391, eng] 41-2447
- Li, W.K.W.**  
Intracellular photosynthate allocation and the control of Arctic marine ice algal production [1987, p.124-132, eng] 41-3998
- Li, X.-M.**  
Mathematical modeling of solute segregation and redistribution during freezing in peat and overlying water [1986, 119p., eng] 41-2639
- Liadov, V.S.**  
Studies of ice-forming properties of phloroglucinol under field conditions [1986, p.116-123, rus] 41-3465
- Liakhova, I.G.**  
Role of forest fires and other ecologic factors in the formation of southern taiga swamps [1986, p.75-80, rus] 41-2899
- Liendi, F.**  
Applications of the finite-element method to the problem of heat transfer in a freezing shaft wall [1986, 24p., eng] 41-595
- Lisapin, V.E.**  
Changes in physical and mechanical properties of frozen ground used as construction material [1986, p.30-34, rus] 41-3443
- Liberman, I.A.**  
Manual for construction foremen working in the northern construction-climatic zone [1986, 328p., rus] 41-3664
- Lidgren, R.A.**  
Bituminous surface treatments in northern Canada [1987, p.735-772, eng] 41-4042  
Performance of bituminous surface treatments in northern Canada [1986, p.206-228, eng] 41-2205
- Liebenberg, D.H.**  
Experimental evidence for a second-order transformation prior to melting in ammonia, organic compounds and ice I [1986, p.949-961, eng] 41-1864
- Lied, K.**  
Statistical and geometrical definition of snow avalanche run-out [1987, p.107-119, eng] 41-4488
- Lien, R.**  
Iceberg scouring and its influence on seabed conditions: investigation and proposed model for the Norwegian shelf [1986, p.87-96, eng] 41-3096
- Lifshitz, R.**  
Nitrogen-fixing pseudomonads isolated from roots of plants grown in the Canadian High Arctic [1986, p.251-255, eng] 41-2493
- Likhachev, A.I.U.**  
Briophytes in the Polar-Alpine Botanical Garden [1986, p.8-12, rus] 41-2776
- Likhachev, A.V.**  
Prospects for the development of a guidance system for ice navigation [1984, p.36-42, rus] 41-558
- Likhachev, S.V.**  
Results of studying noise and vibration of the "Igarka" (SA-15) motorship under ice navigation conditions [1986, p.48-63, rus] 41-3390
- Likhachev, V.D.**  
Slag-pumice concrete for industrial construction [1986, 84p. (Pertinent p.70-84), rus] 41-3022
- Likhtenshtein, E.L.**  
Convective heat- and mass transfer between artificial ice and the atmosphere [1986, p.10-16, rus] 41-2147
- Lin, C.A.**  
Mesoscale circulations initiated by melting snow [1986, p.13,299-13,302, eng] 41-1026
- Lin, F.C.**  
Remote sensing of snow-covered ice [1986, p.4.5.1-4.5.4, eng] 41-97
- Lin, K.C.**  
Outward melting in a cylindrical annulus [1986, p.240-245, eng] 41-850
- Lin, S.**  
Discussion on Anti-heave effect of wind-blown sands in irrigation canal with concrete lining [1986, p.239-244, chi] 41-1422  
Frost heave classification of canal base-soil with concrete lining and the measures against frost damage [1986, p.201-208, chi] 41-1416
- Lindberg, K.**  
Ice impacts on semisubmersibles [1987, p.313-320, eng] 41-2438  
Structural safety of semis in sub-Arctic waters [1986, p.540-564, eng] 41-1117
- Lindh, L.**  
Nivation and local glaciation in N. and S. Sweden. A progress report [1986, p.197-205, eng] 41-1878
- Lindmark, R.**  
Research on engineering in arctic and subarctic regions, the Cold Region Technology Center of Luleå University [1986, p.125-129, eng] 41-970
- Lindqvist, G.**  
Design for a novel icebreaker assisting Arctic LNG vessels [1986, p.257-278, eng] 41-2031
- Lindroos, H.**  
Hydrodynamic loads developed during ice-clogging of a propeller nozzle and means to prevent the clogging [1986, p.1061-1092, eng] 41-1146
- Lindstrom, D.R.**  
Paleoclimatic constraints on the maintenance of possible ice-shelf cover in the Norwegian and Greenland seas [1986, p.313-337, eng] 41-3248
- Ling, C.-H.**  
Arctic sea ice extent and drift, modeled as a viscous fluid [1986, p.71-98, eng] 41-2577
- Lingle, C.S.**  
Subglacial aquifer bed model and water pressure dependent basal sliding relationship for a West Antarctic Ice Stream [1987, p.249-285, eng] 41-3284
- Lingnau, D.G.**  
Canadian Beaufort: a corrosive extreme [1986, p.45-51, eng] 41-2740

- Lintser, A.V.**  
Efficient construction of road pavements for the Tiumen' region [1986, p.10-12, rus] 41-509
- Lior, N.**  
Evaluation of simple analytical solutions for the prediction of freeze-up time, freezing, and melting [1986, p.1727-1732, eng] 41-3291
- Lipa, B.J.**  
HF radar observations of Arctic pack-ice breakup [1986, p.270-275, eng] 41-1509
- Lipps, J.H.**  
Ice diatom floras, Arthur Harbor, Antarctica [1987, p.163-171, eng] 41-3427
- Lipscomb, S.W.**  
Sediment transport characteristics of selected streams in the Susitna River basin, Alaska, October 1983 to September 1984 [1986, 73p., eng] 41-4323
- Liser, I.I.A.**  
Ways of improving the method of medium-range forecasting of ice breakup dates for rivers [1986, p.42-60, rus] 41-1965
- List, C.**  
Weather forecasting—a tool for winter snow and ice control on roads [1979, 20p., eng] 41-235
- List, R.**  
Hail to rain conversion through melting [1984, p.275-278, eng] 41-4399  
Laboratory simulations of graupel growth [1984, p.163-166, eng] 41-4382  
Numerical modelling of hail to rain conversion [1984, p.261-265, eng] 41-4396  
On radiative effects of anthropogenic aerosol components in Arctic haze and snow [1987, p.293-317, eng] 41-4206
- Listkov, V.M.**  
Tribotechnical properties of fluoroplastic-4 and super-high molecular polyethylene in contact with ice and snow [1984, p.8-10, rus] 41-4505
- Liston, R.A.**  
After-action report—Reforger '85 [1986, 20p., eng] 41-3816
- Listov, A.A.**  
Lichen pine forests [1986, 181p., rus] 41-2288
- Listov, A.M.**  
Heating, ventilation and thermal insulation systems of railroad buildings and structures [1986, 81p., rus] 41-2916
- Litovchenko, A.F.**  
Experimental study of water-balance elements of mountain catchment areas [1986, 186p., rus] 41-3742
- Litvan, G.G.**  
Parking garage problem [1985, p.214-218, eng] 41-3192
- Liu, C.**  
New progress of glacier inventory in Tianshan Mountains [1986, p.167-170, chi] 41-1464
- Liu, C.H.**  
On fracture mechanics in lifting an ice sheet [1985, p.189-197, eng] 41-1359
- Liu, T.**  
Probabilistic analysis of sea ice in North Bohai Bay [1987, p.387-391, eng] 41-2447
- Liu, Z.K.**  
Snow survey from meteorological satellite images in the Qilian Mountain basin in Northwest China [1986, p.1335-1340, eng] 41-2139
- Liubarskii, A.N.**  
Influence of atmospheric circulation on long-term changes in ice conditions of the Soviet Arctic seas [1986, p.118-122, rus] 41-1118  
Long-term variability of temperature, pressure and ice conditions in the South Orkney Islands [1986, p.59-65, eng] 41-3950
- Liubimov, G.A.**  
Ice cover and winter runoff of rivers in the eastern part of the BAM zone [1986, p.11-33, rus] 41-422
- Liublinskii, I.N.**  
Introduction of ductless pipe-laying method with solid phenol-poroplast thermal insulation [1986, p.18-20, rus] 41-2796
- Liubomirov, A.S.**  
Thermal erosion in the Baykal Amur railroad zone [1984, p.35-39, rus] 41-4356
- Liverovskaia, I.T.**  
Peculiarities of weathering and soil formation in forest tundra of the Northern Ob' Region [1986, p.58-63, rus] 41-1164
- Liverovskii, I.U.A.**  
Problems of origin and geography of soils [1987, 248p., rus] 41-4555
- Livingstone, C.E.**  
Microwave sea-ice signatures near the onset of melt [1987, p.174-187, eng] 41-3317  
Seasonal and regional variations of active/passive microwave signatures of sea ice [1987, p.159-173, eng] 41-3316
- Livingstone, W.R.**  
Ice-scour research: long-term plan for ESFR [1986, p.307-313, eng] 41-3123
- Ljunggren, J.**  
BV 206—a vehicle for arctic transportation [1986, p.1127-1137, eng] 41-1149
- Liboutry, L.**  
Rock glaciers in the dry Andes [1986, p.18-25, 139-144, rus] 41-4334
- Lo, K.K.**  
Three-parameter snow growth model [1982, p.197-200, eng] 41-14
- Lobacz, E.F.**  
Arctic and subarctic construction: general provisions [1986, 75p., eng] 41-663
- Lobanova, A.B.**  
Biogeochemical anomalies in the cryogenesis zone and criteria for their interpretation [1987, p.170-172, eng] 41-3163
- Lobashov, V.M.**  
Strength of granular ice [1986, p.129-134, rus] 41-2165  
Strength of reinforced-ice materials [1986, p.135-139, rus] 41-2166
- Loboda, A.I.**  
Dust control on quarry roads at subzero temperatures [1985, p.135-136, rus] 41-2771
- Lock, G.S.H.**  
Control of spring run-off in northern rivers: the ice veil concept [1987, p.451-457, eng] 41-3676  
Performance of a closed tube thermosyphon with large length-diameter ratios [1987, p.69-77, eng] 41-2404
- Locke, W.W.**  
Fine particle translocation in soils developed on glacial deposits, southern Baffin Island, N.W.T., Canada [1986, p.33-43, eng] 41-1186
- Lockwood, J.G.**  
Ice calving, carbon dioxide and control of ice ages [1985, p.89-96, eng] 41-4276
- Lodwick, G.D.**  
Digital elevation model of the Barnes Ice-Cap derived from Landsat MSS data [1985, p.1937-1944, eng] 41-868
- Loftness, V.**  
Overall building enclosure evaluation in cold climates: a generic methodology for field measurement [1986, p.510-524, eng] 41-1385
- Loginov, I.I.**  
Performance of sub-drainage systems in peat soils of the Barabai lowland [1984, p.51-52, rus] 41-4089
- Loginov, V.G.**  
Some aspects of economic development of northern regions [1985, p.15-21, rus] 41-205
- Lohanick, A.**  
Scientific challenges at the poles [1987, p.23-26, eng] 41-3408
- Lohanick, A.W.**  
Classification of sea ice types with single-band (33.6 GHz) airborne passive microwave imagery [1986, p.10,661-10,695, eng] 41-1008
- Lohne, P.W.**  
Material selection and fabrication recommendations for arctic offshore structures [1986, p.897-910, eng] 41-1137
- Loire, R.**  
Rope-stretching iceberg arrestor [1986, p.469-478, eng] 41-1613
- Lomasney, J.M.**  
Technical support for the CONUS OTH-B Experimental Radar System [1980, 30p., eng] 41-4326
- Longcope, D.B.**  
Use and validation of cavity expansion load models in determining structural response of penetrators into ice targets [1986, p.481-493, eng] 41-2673
- Lonsdale, J.T.**  
Offshore anti-icing, field results and approval considerations [1986, p.471-483, eng] 41-1113
- Lonseth, L.**  
Environmental conditions under polar lows [1986, p.343-357, eng] 41-1815  
Waves under a small travelling wave field [1986, p.331-341, eng] 41-1814
- Lord, J.B.**  
Ice penetrating buoy tests [1986, p.451-460, eng] 41-2670
- Lord, S.M.**  
Method and means for increasing the maneuverability of a ship in ice-covered waters [1983, 12 col., eng] 41-1981
- Lorius, C.**  
International antarctic glaciological program activities at South Pole Station and Vostok [1985, p.73-74, eng] 41-2633  
Investigation by analytical transmission electron microscopy of individual insoluble microparticles from antarctic (Dome C) ice core samples [1986, p.250-261, eng] 41-1755  
Long-term climatic changes indicated by crystal growth in polar ice [1987, p.62-64, eng] 41-2750
- Lorrain, R.D.**  
Mechanism of basal ice-layer formation involving major ice-fabric changes [1987, p.47-50, eng] 41-3594
- Los', I.N.**  
Estimating the reciprocal influence of underground and open mining under conditions of the Neryunginskii coal deposit [1986, p.33-37, rus] 41-4553
- Løset, S.**  
Computer modelling of ice accretion and control of icing on marine units [1986, p.497-511, eng] 41-1115
- Losev, K.S.**  
Fundamentals of avalanche science [1987, 280p., rus] 41-4129
- Losev, S.M.**  
Nature of winter ruptures in sea ice covers [1986, p.131-134, rus] 41-121  
On the causes of continuity disturbance of sea-ice cover in winter [1986, p.110-116, rus] 41-4204  
Peculiarities of ice movement in the Arctic Basin according to data of the FGGE automatic buoys [1986, p.77-88, rus] 41-4199  
Study of ice movement in the Arctic Ocean by means of the FGGE automatic buoys [1986, 96-103, rus] 41-4202
- Loshchilov, V.S.**  
Cluster analysis of airborne-radar images of ice covers [1986, p.64-72, rus] 41-2718  
Sea ice concentration assessed from aerospace imagery [1987, p.181-189, eng] 41-3626
- Loskutov, V.G.**  
Some features of providing heat supply to thermal power stations being built in regions of temperate and cold climate [1986, p.421-422, eng] 41-4160
- Louie, P.Y.T.**  
Snowmelt acidic shock study in south central Ontario [1986, p.131-138, eng] 41-2618
- Lovchuk, V.V.**  
Origin of some buried ice forms in the Yamal tundra [1986, p.66-75, rus] 41-1793
- Lovell, M.S.**  
Centrifugal modelling of sea ice [1986, p.105-113, eng] 41-1586
- Lowings, M.G.**  
Merchant ship ice navigation studies in the Canadian Arctic [1986, p.859-877, eng] 41-2062
- Lowry, R.**  
Advanced radar systems for support of Arctic marine operations [1986, p.839-858, eng] 41-2061
- Lowry, R.T.**  
"NAV-ICE"—an integrated system for ice navigation [1986, p.457-466, eng] 41-1612
- Loyer, A.**  
High impact welding in Arctic pipeline construction [1987, p.99-108, eng] 41-4630
- Lozowski, E.P.**  
Modelling ice accretion on non-rotating cylinders: the incorporation of time dependence and internal heat conduction [1987, p.177-191, eng] 41-4494
- Lu, P.**  
Formation of the ice algae layer in antarctic sea ice [1986, p.60-65, chi] 41-400  
Measurement and investigation of primary production of the inshore water near Davis, Antarctica [1986, p.38-43, chi] 41-398  
Seasonal variation in marine phytoplankton and ice algae at a shallow antarctic coast site [1987, p.33-46, eng] 41-4084  
Seasonal variation of chlorophyll-a in fast ice at Davis, Antarctica [1986, p.11-19, chi] 41-397  
Significance of nanoplankton in the inshore water at Davis, Antarctica [1986, p.130-135, chi] 41-404  
Some ecological observations on antarctic ice algae [1986, p.49-59, chi] 41-399
- Lu, Q.-M.**  
Sea ice modelling in the East Greenland area [1986, p.147-156, eng] 41-1590
- Lu, X.**  
Influence of moisture condition on frost heave in clay [1986, p.217-222, chi] 41-1418
- Lubart, L.**  
Numerical simulation of hail embryo growth [1984, p.505-508, eng] 41-4406
- Lubiagina, N.P.**  
Artificial coenosis as a plant protection method [1986, p.88-90, rus] 41-2459
- Lucas, P.W.**  
Large-scale fumigation system for investigating interactions between air pollution and cold stress on plants [1987, p.15-28, eng] 41-2858
- Lucchitta, B.K.**  
Antarctica: measuring glacier velocity from satellite images [1986, p.1105-1108, eng] 41-962  
Geomorphologic evidence for ground ice on Mars [1985, p.583-604, eng] 41-1725  
Landsat multispectral images of Antarctica applied to mapping and glaciology [1985, p.256-259, eng] 41-3327  
Mars: periglacial and glacial relief forms [1986, p.183-193, rus] 41-550  
Multispectral digital image mapping of antarctic ice features [1986, p.159-163, eng] 41-761  
Sedimentary deposits in the northern lowland plains, Mars [1986, p.E166-E174, eng] 41-3749  
Snow and ice studies by thematic mapper and multispectral scanner Landsat images [1987, p.109-118, eng] 41-4445
- Luce, M.**  
M.V. Arctic—opening new frontiers for marine transportation in the Canadian High Arctic [1986, p.747-763, eng] 41-2056

- Lucey, P.G.**  
Spectral properties of water ice and contaminants [1985, p.155-168, eng] 41-1703
- Luchitskaya, I.O.**  
Space models of high-velocity winds and low air temperatures in the boundary layer [1986, p.90-107, rus] 41-1972
- Luckman, B.H.**  
Reconstruction of Little Ice Age events in the Canadian Rocky Mountains [1986, p.17-28, eng] 41-2703
- Lueck, L.L.**  
Alaska's mineral industry, 1985 [1986, 68p., eng] 41-569
- Lugovoi, P.N.**  
Theoretical premises for calculating the warming effect of snow cover from meteorological data [1986, p.180-192, rus] 41-2099
- Luk'ianova, L.M.**  
Carbon dioxide gas exchange components of tundra plants at various temperatures [1986, p.1067-1073, rus] 41-1455
- Luk'ianovich, E.V.**  
Influence of sub-zero temperatures on the performance of rubber shock-absorbers [1986, p.95-98, rus] 41-2711
- Lunardini, V.J.**  
Arctic thermal design [1985, p.70-75, eng] 41-1327  
Condensing steam tunnel heat sinks [1986, 29p., eng] 41-1350  
Exact solution for melting of frozen soil with thaw consolidation [1987, p.97-102, eng] 41-2408  
Ice heat sinks. Part 1: Vertical systems [1986, 107p., eng] 41-3815  
Ice heat sinks. Part 2: Horizontal systems [1986, 104p., eng] 41-3818  
Proceedings [1987, 4 vols., eng] 41-2394
- Lunine, J.I.**  
Evolution of Titan's coupled ocean-atmosphere system and interaction of ocean with bedrock [1985, p.741-757, eng] 41-1735
- Leo, Y.**  
Preliminary analyses on the frost damage of northern main canal with concrete lining in Changma irrigation region, Gansu [1986, p.313-318, chi] 41-1438
- Lupien, C.**  
Crack sealing: an evaluation of a few compounds and of a variety of application conditions [1987, p.689-718, eng] 41-4040
- Lussenberg, J.L.**  
Incursion of Alaskan multiyear ice features and their associated scours in the Canadian Beaufort Sea [1986, p.51-59, eng] 41-3091
- Lutsuk, I.V.**  
Engineering preparations for construction of Surgut State Regional Electric Power Plant No.2 [1987, p.14-17, rus] 41-3808
- Luzia, V.I.**  
Prospects of using autoregression methods in measuring ice thickness by continuous radiation systems [1986, p.126-130, rus] 41-705
- Lyberg, M.D.**  
Energy measurements and building parameters for an auditing and energy management system [1986, p.45-52, eng] 41-1378
- Lyford, F.P.**  
Bibliography on ground water in glacial-aquifer systems in the northeastern United States [1986, 26p., eng] 41-2464
- Lyglav, A.V.**  
Conditions of cold resistance and durability of structural elements in the North [1985, p.83-90, rus] 41-2851
- Lygren, E.**  
Water pollution from roadways [1985, 46p., nor] 41-2295
- Lykova, N.I.**  
Consolidation equations of Biot-Florin for three-phase soils [1985, p.56-62, rus] 41-3128
- Lynch, J.F.**  
Results from the 1984 Marginal Ice Zone Experiment preliminary tomography transmissions: implications for marginal ice zone, arctic, and surface wave tomography [1987, p.6869-6885, eng] 41-4244  
Tomographic resolution of mesoscale eddies in the marginal ice zone: a preliminary study [1987, p.6886-6902, eng] 41-4245
- Lynov, I.U.S.**  
Winter factors in seasonal development of plants in high and middle altitude mountains of western Tien Shan [1986, p.78-80, rus] 41-903
- Lyon, G.**  
Underway replenishment in cold weather [1986, p.215-221, eng] 41-934
- Lyon, G.L.**  
Stable isotope stratigraphy of ice cores and the age of the last eruption at Mount Melbourne, Antarctica [1986, p.135-138, eng] 41-610
- Lyons, P.B.**  
Fiber optics in adverse environments [1981, 276p., eng] 41-579
- Lyons, W.B.**  
Seasonal and spatial trends in south Greenland snow chemistry [1987, p.863-869, eng] 41-3890
- Snow chemistry from Xixabangma Peak, Tibet [1986, p.542-543, eng] 41-4312**
- Using an ice core to characterize the climatic history of Antarctica [1985, p.71-72, eng] 41-2631**
- Lysakov, E.P.**  
Atmospheric circulation in the Atlantic sector of the southern ocean according to results of the "Weddell-POLEX-81" expedition [1986, p.45-49, rus] 41-4186  
Influence of atmospheric circulation on the formation of Weddell polynya [1986, p.52-56, rus] 41-4187
- Lystad, M.**  
Norwegian Polar Lows Project [1986, p.1-16, eng] 41-1796  
Proceedings of the International Conference on Polar Lows, 1986 [1986, 364p., eng] 41-1795
- Lysy, I.B.**  
Computerized simulation of economic development of a mineral raw material base in the northern Urals [1985, p.39-45, rus] 41-208
- Lyrra, M.**  
Adhesive strength of spray accreted ice on materials and coatings [1986, p.484-496, eng] 41-1114
- Ma, Y.**  
Shaft sinking in water-bearing noncompetent strata in China [1985, p.1434-1437, eng] 41-857
- Maattanen, M.**  
Advance in ice mechanics in Finland [1987, p.7-14, eng] 41-2931  
Ten years of ice-induced vibration isolation in lighthouses [1987, p.261-266, eng] 41-2430  
Test cone project [1986, p.749-761, eng] 41-1130
- Macarbenia, T.**  
Pneumatic deicer and deicing method [1983, 6 col. + figs., eng] 41-2498
- MacAyeal, D.R.**  
Ice-shelf backpressure: form drag versus dynamic drag [1987, p.141-160, eng] 41-3278  
Ice stream-ice shelf interaction in West Antarctica [1987, p.161-180, eng] 41-3279  
Numerical models of the Filchner-Ronne Ice Shelf: an assessment of reinterpreted ice thickness distributions [1986, p.10,457-10,462, eng] 41-1022  
Paleoclimatic constraints on the maintenance of possible ice-shelf cover in the Norwegian and Greenland seas [1986, p.313-337, eng] 41-3248  
Recent advance of the Ross Ice Shelf, Antarctica [1986, p.464-474, eng] 41-4302  
Rectified tidal currents and tidal-mixing fronts: controls on the Ross Ice Shelf flow and mass balance [1983, 274p., eng] 41-3073
- MacDonald, L.H.**  
Forest harvest, snowmelt and streamflow in the central Sierra Nevada [1987, p.273-283, eng] 41-4317
- Macchemehl, J.L.**  
Performance requirements and operational efficiency of an Arctic dredge spread [1987, p.125-130, eng] 41-4633  
Physical model study of an icebreaking tanker moored to an offshore SPM terminal in moving ice [1987, p.329-339, eng] 41-2440
- Macheret, I.U.I.A.**  
Radio echo-sounding of sub-polar glaciers in Svalbard: some problems and results of Soviet studies [1987, p.151-159, eng] 41-4450
- MacInnis, C.**  
Microclimate of concrete barrier walls: temperature, moisture and salt content [1986, p.615-623, eng] 41-1997
- MacKay, J.R.**  
First 7 years (1978-1985) of ice wedge growth, Illisarvik experimental drained lake site, western arctic coast [1986, p.1782-1795, eng] 41-2963  
Growth of Ibyuk Pingo, western Arctic coast, Canada, and some implications for environmental reconstructions [1986, p.68-80, eng] 41-791  
Pingo ice of the western Arctic coast, Canada [1985, p.1452-1464, eng] 41-1238  
Simple probe for the measurement of frost heave within frozen ground in a permafrost environment [1987, p.37-41, eng] 41-4008
- MacKay, W.C.**  
Proceedings [1986, 74p., eng] 41-1034
- MacKeith, P.**  
Effects of the 1966-68 eruptions of Mount Redoubt on the flow of Drift Glacier, Alaska, U.S.A. [1986, p.355-362, eng] 41-4288  
Short period motion events on Variegated Glacier as observed by automatic photography and seismic methods [1986, p.82-89, eng] 41-744
- MacLean, B.**  
Study of iceberg scours across the continental shelf and slope off southeast Baffin Island using the Sea MARC I midrange sidescan sonar [1987, p.847-857, eng] 41-4014
- MacLeod, D.R.**  
Bituminous surface treatments in northern Canada [1987, p.735-772, eng] 41-4042  
Performance of bituminous surface treatments in northern Canada [1986, p.206-228, eng] 41-2205
- MacMaster, J.B.**  
Role of extruded expanded polystyrene in Ontario's provincial transportation system [1987, p.575-618, eng] 41-4037
- MacNeill, M.R.**  
Oil motion during lead closure [1987, 13p., eng] 41-4529
- MacPhee, S.**  
Charting of safe deep draught shipping routes in Canadian Arctic waters [1986, p.820-838, eng] 41-2060
- MacPherson, S.**  
Numerical simulation of an Alberta hailstorm [1984, p.585-588, eng] 41-4407
- Maddock, W.**  
Applications of spray ice and rubble ice for Arctic offshore exploration [1987, p.1-7, eng] 41-2395
- Maddox, J.**  
Amorphous ice still a puzzle [1987, p.823, eng] 41-3638
- Madi, M.B.**  
Formation and melting of a vertical ice slab in an enclosure [1987, p.167-177, eng] 41-2882
- Mae, S.**  
Airborne radio echo-sounding in Shirase Glacier drainage basin, Antarctica [1987, p.160-165, eng] 41-4451  
Bottom topography and internal layers in east Dronning Maud Land, East Antarctica, from 179 MHz radio echo-sounding [1987, p.221-224, eng] 41-4463
- Maeno, N.**  
Experimental study on the initiation of blowing snow [1985, p.195-200, jpn] 41-4588  
Ground freezing '85—a summary [1987, p.301-306, eng] 41-3039  
Time-variations of the density of mixed-phase snow flows as measured by an electric capacitance method [1986, p.19-26, jpn] 41-3876
- Maes, M.A.**  
Probabilistic theories for the failure of sea ice [1986, p.37-54, eng] 41-1581
- Maestri, S.Y.**  
Nutrient limitation of the bottom-ice microalga biomass (southeastern Hudson Bay, Canadian Arctic) [1986, p.969-982, eng] 41-1473
- Maevskii, A.A.**  
Process of hard snow formation on East Siberian roads [1986, p.87-92, rus] 41-2160
- Maggioretti, P.**  
Winter trafficability of roads with heavy traffic: information, safety, maintenance [1986, p.48-56, ita] 41-2231
- Magono, C.**  
Experiments on aerosol scavenging by natural snow crystals. Pt.3. The effect of snow crystal charge on collection efficiency [1985, p.1127-1137, eng] 41-2569
- Mahönen, T.**  
Natural and forced convection in mineral fibre wall insulation [1986, 119p., fin] 41-2522
- Mahoney, J.P.**  
Investigation of seasonal load restrictions in Washington State [1985, p.58-67, eng] 41-609
- Makarenko, G.P.**  
Effectiveness of the gradual and selective cuttings in the Bilimbaev spruce forests [1986, p.89-97, rus] 41-2877
- Makarevich, K.G.**  
Influence of large-scale atmospheric processes on the fluctuations of glaciers [1986, p.52-58, 179-185, eng] 41-1055  
Recent fluctuations of mountain glaciers in the Northern Hemisphere [1986, p.25-33, 157-163, eng] 41-1050
- Makarov, A.P.**  
Designing low-load foundations of rural buildings in Transbaikalia [1985, p.59-61, rus] 41-305
- Makarov, V.**  
March under arctic conditions [1986, p.74-76, rus] 41-3932
- Makarov, V.A.**  
Design and construction of the socle part of the Kureyskaya channel dam [1986, p.27-31, rus] 41-2866  
Lay-out and structural design of basic structures of the Kureyskaya hydroelectric plant [1986, p.11-17, rus] 41-2863  
Passing construction wastes and spanning the river at the Kureyskaya station site [1986, p.23-27, rus] 41-2865  
Present state and prospects of artificial reforestation in the Bilimbaev model forest [1986, p.98-109, rus] 41-2878
- Makarov, V.I.**  
Controlling temperature regime of frozen massive rocks in northern construction [1983, p.13-29, rus] 41-4472  
Experience in producing fragments of water-raising hydraulic structures built of ice [1986, p.161-171, rus] 41-3459
- Makarov, V.N.**  
Possibilities and prospects of geochemical exploration in northern taiga permafrost areas [1986, p.158-159, rus] 41-201  
Remote sounding and interpretation of cryo-hydro-geochemical anomalies [1986, p.133-144, rus] 41-3494
- Makarova, I.I.**  
Lichens in the middle Paliavaam River area (western part of the Chukot highlands) [1986, p.105-108, rus] 41-2778
- Makarova, N.A.**  
Improving thermotechnical properties of lightweight concretes for external wall panels [1987, p.36-37, rus] 41-2794



- Makarova, N.A. (cont.)**  
Requirements for thermotechnical properties of lightweight concretes for one-layer enclosures for the North [1986, p.42-53, rus] 41-2919  
Thermal and technical properties of light concretes of one-layer enclosures designed for the North [1986, p.36-37, rus] 41-1889
- Makarova, V.N.**  
Designing low-load foundations of rural buildings in Transbaikalia [1985, p.59-61, rus] 41-305
- Makoev, A.M.**  
Design and construction of mobile buildings on railroad construction sites of the North [1986, p.21-23, rus] 41-1533
- Makoev, O.V.**  
Modern concept of soil cryogenesis, the evolution of cryogenic soils in Holocene and problems of land reclamation in the presence of permafrost [1986, p.37-46, rus] 41-2353  
Recent cryological problems of the Dokuchaev pedology [1986, p.118-125, rus] 41-522  
Temperature field and annual heat cycles in soils [1986, p.27-31, rus] 41-1744
- Makoev, V.M.**  
Formation of the relief and deposits in areas of present-day glaciation on Severnaya Zemlya [1986, p.331-338, eng] 41-3625
- Makhdoom, M.T.A.**  
Attempting flow forecasts for the Indus River, Pakistan using remotely sensed snow cover data [1986, p.171-184, eng] 41-4517
- Makhottan, O.P.**  
Microflora and the biologic activity of soils in the Lower Angara depression [1985, p.88-101, rus] 41-4112
- Maki, M.**  
Radar observations of snowfall in 1986 over the Shinjo basin —features of vertical structures [1987, p.1-17, jpn] 41-4002
- Makinen, E.**  
Arctic marine technology: state of the art and prospects for the 1990's [1986, p.220-243, eng] 41-2029  
First winter's experience with the air cushion vehicle *Larus* in the Beaufort Sea [1986, p.693-709, eng] 41-2052
- Makkonen, L.**  
Field measurements of the adhesion strength of ice [1986, p.725-734, eng] 41-1128
- Makowski, E.**  
Finite-element method of modeling artificial freezing of deep soil with ground water flowing through it [1986, 292p., ger] 41-2229
- Makshtas, A.P.**  
Characteristics of atmospheric and hydrophysical processes in Fram Strait during fall and winter [1986, p.151-157, eng] 41-3267  
Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship [1986, p.139-145, eng] 41-3265  
Small-scale interaction between atmosphere and ocean at Maud Rise [1986, p.67-71, rus] 41-4189  
Studies of ice-edge zones of Arctic seas [1986, p.131-138, eng] 41-3264
- Maksimenko, E.S.**  
Determination of the deformation characteristics of permafrost by the method of probe thawing [1987, p.248-251, eng] 41-4166
- Maksimyak, R.V.**  
Developing and standardizing methods of determining the structural properties of frozen grounds [1983, p.19-21, rus] 41-4482
- Maksimov, A.B.**  
Using pattern recognition methods in engineering-glaciological terrain analysis [1986, p.165-169, rus] 41-1662
- Maksimov, A.M.**  
Cooling of a salt solution [1987, p.1344-1347, eng] 41-4164  
Formation of a two-phase zone during the crystallization of a mixture in a porous medium [1986, p.447-449, eng] 41-3628
- Maksimov, G.A.**  
Winter climatic conditions in Somov Sea based on the drift data of d/e the Ob' in 1973 [1986, p.72-79, eng] 41-3951
- Maksimov, G.N.**  
Erection of residential buildings, without ventilated crawl spaces, in permafrost areas [1983, p.77-81, rus] 41-4477
- Maksimov, V.I.**  
Mechanized laying of communication cables under difficult conditions [1987, 161p., rus] 41-3609
- Maksimova, L.N.**  
Climatic fluctuations and the peculiarities of Holocene permafrost development in the USSR [1986, p.45-58, rus] 41-2085  
Prognostic geocryological mapping at the regional and the design research stages [1986, p.38-45, rus] 41-2084  
Significance of cryogenic processes in the formation of ridge-pool microrelief in high bogs [1986, p.147-151, rus] 41-2833
- Makstov, D.D.**  
Problem of diminishing the force of icebreaker friction against ice [1984, p.15-16, rus] 41-4508
- Seasonal activity and scientific observations in the 27th Soviet Antarctic Expedition [1986, p.5-9, rus] 41-4181
- Makushkin, D.O.**  
Studying hydraulic drive of drilling equipment at low temperatures [1978, p.63-68, rus] 41-1323
- Malanson, G.P.**  
History of high-magnitude snow avalanches, southern Glacier National Park, Montana, U.S.A. [1985, p.175-182, eng] 41-3969
- Malaurie, J.**  
Slopes and scree of northwest Greenland: general study and observations compared with the mechanical erosion on the Moon and on Mars [1985, p.63-79, fre] 41-374
- Malhi, S.S.**  
Increase in mineral N in soils during winter and loss of mineral N during early spring in north-central Alberta [1986, p.397-409, eng] 41-1085
- Malhotra, V.**  
Durability of concrete containing supplementary cementing materials in marine environment [1987, p.1227-1258, eng] 41-3725
- Malhotra, V.M.**  
Fly ash, silica fume, slag, and natural pozzolans in concrete: Proceedings [1986, 1609p., (2 vols.), eng] 41-1152  
Mechanical properties, and freezing-and-thawing resistance of non-air-entrained and air-entrained condensed silica-fume concrete using ASTM test C 666, procedures A and B [1986, p.1069-1094, eng] 41-1155
- Malik, L.K.**  
Human factor impacts on Siberian floodplains during land reclamation [1986, p.64-71, rus] 41-1367  
Prospects and possible consequences of hydraulic meliorations in western Siberia [1986, p.77-89, rus] 41-4573
- Mallina, A.G.**  
Influence of temperature of the medium on technological properties of carbamide resins used in the injection-strengthening of rocks [1986, p.29-33, rus] 41-3767
- Mallinovsky, D.V.**  
Ways of unifying indices of the resistance of perennially frozen disperse rocks to water erosion for predicting thermohydro-mechanical denudation in the cryolithozone [1987, p.63-68, rus] 41-3397
- Malukov, V.A.**  
Polymer-concrete supports of power lines [1985, p.41-50, rus] 41-1544
- Malmberg, S.**  
"Larus" —hovercraft for the Arctic [1986, p.15, eng] 41-87
- Malmström, B.**  
Permafrost mounds in the Abisko area, northern Sweden [1986, p.155-165, eng] 41-1874
- Malone, S.**  
Propagating alaska anomalies during mini-surges of Variegated Glacier, Alaska, U.S.A. [1986, p.178-191, eng] 41-677
- Malyschenko, I.U.I.**  
Influence of the atmosphere and snow cover on the emissive properties of ice [1986, p.119-123, rus] 41-703
- Malyshev, A.G.**  
Conditions of hydrate formation in drowned oil-gas wells [1986, p.21-23, rus] 41-3772
- Malyshev, A.I.A.**  
For northern construction sites [1986, p.49-50, rus] 41-2792
- Malyshev, L.I.**  
Botanical studies in Siberian preservation parks [1986, p.85-88, rus] 41-2458
- Malyshev, V.M.**  
Automatic low-temperature calorimeter [1986, p.1456-1459, eng] 41-956
- Malysheva, G.N.**  
Conditions of hydrate formation in drowned oil-gas wells [1986, p.21-23, rus] 41-3772
- Matkanov, D.M.**  
Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan [1984, 110p., rus] 41-7821
- Mamatkulov, U.K.**  
Analysis of endemic species of moss flora in Central Asia [1986, p.39-49, rus] 41-2777
- Mamin, F.N.**  
Detectors of icing on overhead power lines [1987, p.49-51, rus] 41-3612
- Manalson, G.P.**  
Floristic patterns on avalanche paths in the northern Rocky Mountains, USA [1986, p.231-238, eng] 41-1257
- Mancinelli, R.L.**  
Alpine tundra soil bacterial responses to increased soil loading rates of acid precipitation, nitrate, and sulfate, Front Range, Colorado, U.S.A. [1986, p.269-275, eng] 41-1176  
Perennial N<sub>2</sub> supersaturation in an antarctic lake [1987, p.343-345, eng] 41-2506
- Mandrikov, V.I.**  
Special load lifter for installing 1150 kV overhead lines [1986, p.23-25, rus] 41-1921
- Mandych, A.F.**  
Water transfer processes and indication of underlying surface saturation by remote sensing [1986, p.45-55, rus] 41-2735
- Mangazeev, V.I.A.**  
Combined methods of studying nival-glacial relief-forming processes in mountainous areas of the Baykal Amur railroad areas (Northern Transbaikalia) [1986, p.82-86, rus] 41-3519
- Mangus, A.R.**  
Concrete foundations on permafrost [1987, p.40-42, eng] 41-3783
- Manicheva, O.M.**  
Control of thermal regime during mine excavation in permafrost [1985, p.144-146, rus] 41-196
- Manley, T.O.**  
Current regimes across the East Greenland Polar Front at 78 deg 40' north latitude during summer 1984 [1987, p.6741-6753, eng] 41-4234  
Effect of sub-ice mesoscale features within the marginal ice zone of Fram Strait [1987, p.3944-3960, eng] 41-3063  
Mesoscale oceanographic processes beneath the ice of Fram Strait [1987, p.432-434, eng] 41-2804  
Science program of the FRAM experiments in the Eastern Arctic Ocean [1985, p.420-428, eng] 41-221  
Use of synthetic aperture radar-derived kinematics in mapping mesoscale ocean structure within the interior marginal ice zone [1987, p.6837-6842, eng] 41-4241
- Mann, K.**  
Terrace scarp deflation as a renewable source for eolian sediments in an arctic periglacial setting [1987, p.45-52, eng] 41-4224
- Manning, C.E.**  
Geologic field studies of the Miki Fjord area, East Greenland [1985, p.219-235, eng] 41-872
- Manning, D.**  
Rational approach to corrosion protection of the concrete components of highway bridges [1987, p.1527-1547, eng] 41-3732
- Manabridge, J.V.**  
Effective age of bubbles in polar ice [1985, p.777-790, eng] 41-2111  
Incompatibility of ice-core CO<sub>2</sub> data with reconstructions of biotic CO<sub>2</sub> sources [1987, p.318-325, eng] 41-4207
- Mansfield, T.A.**  
Large-scale fumigation system for investigating interactions between air pollution and cold stress on plants [1987, p.15-28, eng] 41-2858
- Manzhara, A.A.**  
Numerical simulation of the evolution of seeded supercooled stratiform clouds [1986, p.26-41, rus] 41-3670
- Mao, X.**  
Significance of nanoplankton in the inshore water at Davis, Antarctica [1986, p.130-135, chi] 41-404
- Maradudin, I.I.**  
Fir trees [1986, 238p., rus] 41-2259
- Marakhtanov, V.P.**  
Engineering-geological evaluation of railroad construction areas [1986, p.12-13, rus] 41-2791
- Marbouty, D.**  
What triggers an avalanche [1986, p.125-142, eng] 41-1978
- Marcellus, R.W.**  
Some recent studies relating to the determination of pipeline depths [1986, p.295-303, eng] 41-3122
- March, G.D.**  
Snow avalanche atlas, Seward Highway, south-central Alaska [1982, 168p., eng] 41-560
- Marchant, H.J.**  
Seasonal variation in marine phytoplankton and ice algae at a shallow antarctic coast site [1987, p.33-46, eng] 41-4084
- Marchenko, I.I.**  
Calculation of harmonic levels in currents and their influence on communication lines when thawing iced power lines [1986, p.16-21, rus] 41-2546
- Marchi, M.**  
Lattice vibrations and infrared absorption of ice Ih [1986, p.2414-2418, eng] 41-395
- Marenin, I.A.**  
Increasing the accuracy of determining deformation characteristics of thawing ground [1985, p.97-99, rus] 41-323
- Marie, R.**  
Hout Nègre avalanche of Jan. 31, 1986 at Barèges and Sers [1987, p.25-34, fre] 41-3419
- Marinescu, K.**  
Modified method for intensive dynamic compaction of weak soils [1986, p.73-78, eng] 41-1851
- Markham, W.E.**  
Ice cover [1986, p.101-116, eng] 41-2593
- Markina, N.G.**  
Photo-control tie of the SMP-32 to the MSU-S data and some reflection spectra characteristics of natural objects [1985, p.57-66, rus] 41-1040
- Marklund, S.**  
Effect of snowmelt on the active sludge process [1982, p.17-33, swe] 41-2855
- Marko, J.R.**  
Evaluation of the feasibility of acoustic radar detection of icebergs in pack ice [1987, 135p., eng] 41-3413  
Iceberg severity revisited [1986, p.413-428, eng] 41-157

- Physical approaches to iceberg severity prediction [1986, 104p., eng] 41-274
- Markov, M.N.**  
Water in regolith from Mare Crisium (Luna 24)? [1978, p.285-288, rus] 41-3208
- Markov, V.S.**  
Possibility of using roof-supports made of frozen ice-shingle-gravel mixtures in northern placer mines [1986, p.201-208, rus] 41-2179
- Marks, D.**  
Snow mapping and classification from Landsat thematic mapper data [1987, p.97-103, eng] 41-4443
- Markson, R.**  
Mesoscale variations in surface stress, heat fluxes, and drag coefficient in the marginal ice zone during the 1983 Marginal Ice Zone Experiment [1987, p.6921-6932, eng] 41-4248
- Markus, I.A.A.**  
Possibility of distinguishing landscape types and evaluating their hydrologic properties from space photographs [1986, p.153-159, rus] 41-1373
- Marocchi, A.**  
Snow-gun season [1987, p.39-41, ita] 41-3309
- Marosy, M.**  
Disk camera system for automatic recording of visual data: snow depth in field plots [1987, p.927-929, eng] 41-4230
- Marriott, R.**  
Ice divide at Blue Glacier, U.S.A. [1986, p.175-176, eng] 41-764
- Marrone, M.J.**  
Low-temperature behaviour of high-birefringence fibres [1985, p.703-704, eng] 41-1410
- Marschall, B.V.**  
Changing climate: geothermal evidence from permafrost in the Alaskan Arctic [1986, p.689-696, eng] 41-1254
- Marsh, P.**  
Grain growth in a wet arctic snow cover [1987, p.23-31, eng] 41-4213  
Hydrothermal decay of ice jams [1985, p.272-276, eng] 41-1504  
Water temperature and heat flux at the base of river ice covers [1987, p.33-50, eng] 41-4214
- Marshall, W.F.**  
Technical support for the CONUS OTH-B Experimental Radar System [1980, 30p., eng] 41-4326
- Marshunova, M.S.**  
Short-wave radiation conditions in Antarctica based on the results of 20 years of observations. [1986, p.8-16, eng] 41-3949
- Marthaler, J.G.**  
Ship operations [1985, p.267-269, eng] 41-3328
- Martikainen, H.**  
Weldable, high strength, high toughness cast steel for sub-arctic offshore applications [1986, p.911-932, eng] 41-1138
- Martin, D.L.**  
Use of "Five-Minute Epoxy" as a cryogenic leak sealant [1987, p.314-315, eng] 41-2469
- Martin, H.**  
Ablative melting of a solid cylinder perpendicularly pressed against a heated wall [1986, p.1407-1415, eng] 41-566
- Martin, H.E.**  
Rock glaciers, ice-cored moraines and the problem of "hidden" ice in glacier mapping [1986, p.181-183, eng] 41-766
- Martin, K.**  
Ice detection systems—experimental feature. Final report [1986, 11p. + append., eng] 41-3510
- Martin, S.**  
Behavior of the Bouchard No.65 oil spill in the ice-covered waters of Buzzards Bay [1978, p.267-276, eng] 41-2124  
High-frequency ice floe collisions in the Greenland Sea during the 1984 Marginal Ice Zone Experiment [1987, p.7071-7084, eng] 41-4262  
Shuttle Imaging Radar B (SIR-B) Weddell Sea ice observations: a comparison of SIR-B and scanning multichannel microwave radiometer ice concentrations [1987, p.7173-7179, eng] 41-4269
- Martineau, G.**  
Southeastward ice flow in central Quebec and its paleogeographic significance [1985, p.1536-1541, eng] 41-1239
- Martinez, J.**  
Expert system for snowmelt runoff modeling and forecasting [1986, p.174-180, eng] 41-249  
Interpretation and utilization of areal snow-cover data from satellites [1987, p.166-169, eng] 41-4452  
Large-area deterministic simulation of natural runoff from snowmelt based on Landsat MSS data [1986, p.1013-1017, eng] 41-2303  
Need for improved snow-cover monitoring techniques [1986, p.173-179, eng] 41-3895  
Pattern recognition of air photographs for estimation of snow reserves [1987, p.76-80, eng] 41-4439
- Martinelli, M., Jr.**  
Test of the avalanche runout equations developed by the Norwegian Geotechnical Institute [1986, p.19-33, eng] 41-1301
- Martinez-Sanchez, M.**  
Numerical modeling of optically significant characteristics of falling snow [1983, p.78-85, eng] 41-2314
- Martini, A.**  
Contemporary periglacial weathering processes of the mountain massifs in the Hornsund area (SW Spitsbergen) [1986, p.45-73, eng] 41-1551
- Martini, I.P.**  
Canadian inland seas [1986, 494p., eng] 41-2591  
Coastal features of Canadian inland seas [1986, p.117-142, eng] 41-2594
- Martinson, C.R.**  
Impulse radar sounding of level first-year sea ice from an icebreaker [1985, 9p., eng] 41-461  
Mine detection using non-sinusoidal radar. Part 1: Spatial analysis of laboratory test data [1984, 99p., eng] 41-462
- Martner, B.E.**  
Radar and aircraft observations of generating cells [1982, p.473-476, eng] 41-60
- Marty, R.C.**  
Vertical sediment flux beneath annual sea ice, McMurdo Sound, Antarctica [1985, p.109-111, eng] 41-2950
- Martynenko, A.A.**  
Snow cover erosion during wind-stream flow around an obstacle [1986, p.160-165, rus] 41-1661
- Martynenko, V.A.**  
Natural revegetation of areas affected by industrial activities in the subpolar Ural Mountains [1986, p.1663-1668, rus] 41-3026
- Marusin, S.**  
Improvement of concrete durability against intrusion of chloride-laden water by using sealers, coatings and various admixtures [1987, p.599-619, eng] 41-3701
- Marusin, S.L.**  
Chloride ion penetration in conventional concrete and concrete containing condensed silica fume [1986, p.1119-1133, eng] 41-1157
- Maruyama, K.**  
Construction of the mobile drilling platform (Super CIDS) for Arctic use [1985, p.89-102, eng] 41-1871
- Maruyama, T.**  
Temperature distributions in asphalt pavements [1987, p.241-275, eng] 41-4025
- Marwitz, J.D.**  
Geographic winter storm structure in California [1984, p.315-316, eng] 41-4403  
Hydrometeor distributions in California rainbands [1982, p.207-210, eng] 41-17
- Masilanec, K.C.**  
Enthalpy method applied to phase change problems in arbitrarily shaped regions [1985, p.194-205, eng] 41-3339
- Maslany, M.P.**  
Seismic bedrock depth measurements and the origin of George VI Sound, Antarctic Peninsula [1987, p.51-65, eng] 41-3811
- Maslennikov, V.V.**  
Conditions for the formation of task economic complexes in northern regions [1985, p.28-32, rus] 41-206
- Maslov, A.D.**  
Cryolithogenesis under littoral and sublittoral conditions in northern Eurasia [1986, p.79-85, rus] 41-2539
- Manson, D.**  
Wave growth in scattered sea-ice [1987, p.257-266, eng] 41-3167
- Masson, P.L.**  
Importance of the tectonic motions on Ganymede [1985, p.759-766, eng] 41-1736  
Martian polar caps: a review [1985, p.521-534, eng] 41-1722  
Tectonics of Valhalla basin on Callisto [1985, p.781-790, eng] 41-1738
- Masterson, D.M.**  
Current ice road and structure design and construction procedures [1986, p.602-648, eng] 41-2048  
Drilling of a well from a sprayed floating ice platform Cape Allison C-47 [1987, p.9-16, eng] 41-2396  
In situ measurement of visco-elastic properties of flooded ice and spray ice using flatjacks [1987, p.17-23, eng] 41-2397
- Masuda, N.**  
Accumulation rate of Mizuho Station, East Antarctica: an application of the Pb-210 method [1986, p.159-165, eng] 41-1472
- Matheson, J.R.**  
Future of sub-arctic and arctic offshore development in Canada [1986, p.149-159, eng] 41-2270
- Matishov, G.G.**  
All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries [1986, 268p., rus] 41-2384  
Ecologic problems of protecting living organisms in northern seas [1986, p.13-16, rus] 41-2387  
Life and living conditions of the Barents Sea benthos [1986, 220p., rus] 41-1901
- Recent trends in studying the ecology of Polar seas of the Arctic [1986, p.1-5, rus] 41-2385
- Matrosov, I.U.A.**  
Thermal performance of the building envelope [1986, 400p., rus] 41-1749
- Matsela, V.F.**  
Controlling filtration regimes of taliks beneath rivers by using pneumatic screens [1986, p.114-119, rus] 41-3454
- Matson, M.**  
Hydrologic and land sciences applications of NOAA polar orbiting satellite data [1985, 20p., eng] 41-976
- Matsuda, O.**  
Experimental decomposition of particulate organic matter collected under the fast ice in Lützow-Holm Bay, Antarctica, with special reference to the fate of carbon, nitrogen and phosphorus [1986, p.55-66, eng] 41-3632  
Oceanographic and marine biological data based on the routine observations near Syowa Station between Feb. 1984 and Jan. 1985 (JARE-25) [1987, 21p., eng] 41-3667  
Overwintering strategy of antarctic krill (*Euphausia superba* Dana) under the coastal fast ice off the Ongul Islands in Lützow-Holm Bay, Antarctica [1986, p.67-85, eng] 41-3633  
Snow algal blooms and their habitat conditions observed at Syowa Station, Antarctica [1986, p.191-197, eng] 41-3635
- Matsuda, S.**  
Heat pipe deicing apparatus [1981, 6 col., eng] 41-1673
- Matsuishi, M.**  
Model tests on ice-rubble size and ship resistance in ice rubble [1986, p.229-243, eng] 41-1291
- Matsuleva, G.N.**  
Influence of climatic factors on radial increment of trees and stands in the central Angara River region [1984, p.49-56, rus] 41-1079
- Matsumae, A.**  
Microbiological investigation of the human pollution at Syowa Station in Antarctica. Special reference to the specimen collected by the 23rd Japanese Antarctic Research Expedition. Pt.2 [1985, p.541-546, jpn] 41-3568
- Matsumoto, G.**  
Development of composite members for Arctic offshore structures [1986, p.660-677, eng] 41-1123
- Matsumoto, T.**  
Comments on the map of free-air gravity anomaly of the antarctic region [1986, p.19-22, eng] 41-1471
- Matsuno, R.**  
Analysis of ice crystallization in continuous crystallizers based on a particle size-dependent growth rate model [1986, p.2241-2246, eng] 41-1348
- Matsu, T.**  
Melting of snowflakes in the atmosphere [1984, p.279-281, eng] 41-4400
- Mathews, J.A.**  
(14)C dating and palaeoenvironment of the historic 'Little Ice Age' glacier advance of Nigardsbreen, Southwest Norway [1986, p.369-375, eng] 41-2472  
Studies on a glifluction lobe: Jotunheimen, Norway: C-14 chronology, stratigraphy, sedimentology and palaeoenvironment [1986, p.345-360, eng] 41-3565
- Mattysse, J.**  
Bibliography of alpine and subalpine areas of the Front Range, Colorado [1986, 114p., eng] 41-697
- Matveev, A.A.**  
Methods of estimating economic losses from water pollution by dredging [1985, p.63-66, rus] 41-210
- Matveev, N.P.**  
Studies of natural conditions and prospects for their application [1985, 118p., rus] 41-4560
- Matveeva, N.V.**  
Leafy mosses in the vicinity of Kresty village (southern tundra subzone, western Taymyr) [1986, p.89-100, rus] 41-1335  
Southern tundras in the system of zonal subdivision [1986, p.192-204, rus] 41-1341  
Southern tundras of Taymyr [1986, 208p., rus] 41-1331  
Vascular plant flora in the vicinity of Kresty village [1986, p.101-117, rus] 41-1336  
Vegetation of southern tundras in western Taymyr Peninsula [1986, p.5-67, rus] 41-1332
- Mätzler, C.**  
Possibilities and limits of synthetic aperture radar for snow and glacier surveying [1987, p.195-199, eng] 41-4457  
Sensor for monitoring the dielectric constant of snow [1984, p.97-105, ger] 41-628
- Maunula, M.**  
Interactive effects of river ice conditions, hydroelectric power plants and multipurpose watercourse operation [1986, p.45-54, eng] 41-537
- Maurette, M.**  
Placers of cosmic dust in the blue ice lakes of Greenland [1986, p.869-872, eng] 41-1070
- Mäusbacher, R.**  
New data on the relief development of the South Shetland Islands, Antarctica [1986, p.211-218, eng] 41-1279
- Mavrin, D.S.**  
Concentration of impurities during melting of snow made from secondary sewage effluent [1986, p.151-156, eng] 41-351

- Maxwell, J.B.**  
Climate overview of the Canadian inland sea [1986, p.79-100, eng] 41-2592  
Overview of project to measure ice forces at Adams Island [1986, p.651-663, eng] 41-171
- Mayer, D.**  
Ground aircraft deicing technology review [1986, var.p., eng] 41-3378  
State-of-the-art of ground aircraft deicing technology [1986, 13p., eng] 41-1354
- Mayer, E.**  
Calorimetric study of the vitrified liquid water to cubic ice phase transition [1987, p.503-505, eng] 41-3312  
Cubic ice from liquid water [1987, p.601-602, eng] 41-3637  
Polymorphism in vapor deposited amorphous solid water [1985, p.81-88, eng] 41-1698
- Mayewski, P.A.**  
Seasonal and spatial trends in south Greenland snow chemistry [1987, p.863-869, eng] 41-3890  
Snow chemistry from Xixabangma Peak, Tibet [1986, p.542-543, eng] 41-4312  
Using an ice core to characterize the climatic history of Antarctica [1985, p.71-72, eng] 41-2631
- Maykut, G.A.**  
Boundary layer, upper ocean, and ice observations in the Greenland Sea marginal ice zone [1987, p.6987-7011, eng] 41-4255  
Dynamics and thermodynamics of the ice/upper ocean system in the marginal ice zone of the Greenland Sea [1987, p.7017-7031, eng] 41-4257  
Role of shortwave radiation in the summer decay of a sea ice cover [1987, p.7032-7044, eng] 41-4258  
Surface heat and mass balance [1986, p.395-463, eng] 41-2991
- Maynard, N.G.**  
Satellite color observations of spring blooming in Bering Sea shelf waters during the ice edge retreat in 1980 [1987, p.7127-7139, eng] 41-4266
- Mazhitova, G.G.**  
Soil cover of the Sibit-Tyellakh river basin [1985, p.30-43, rus] 41-4120
- Mazin, I.P.**  
Interaction of clouds with the surrounding aerosol medium [1982, p.42-48, eng] 41-1006
- Mazo, A.B.**  
Calculating the volume of a stationary mountain glacier [1986, p.88-98, rus] 41-779
- Mazo, V.B.**  
Modeling glacier surges and climatically induced fluctuations [1986, p.97-102, 210-214, rus] 41-4349
- Mazo, V.L.**  
Self-organization of glacial relief [1986, p.309-312, rus] 41-2305  
Waves on glacial beds [1986, p.20-26, rus] 41-101
- McArthur, B.**  
Development and roles of the Eastern Snow Conference [1985, p.1-24, eng] 41-1480
- McAvoy, G.**  
Advanced radar systems for support of Arctic marine operations [1986, p.839-858, eng] 41-2061  
Ergonomic evaluation of STAR-VUE and NAV-ICE [1986, 130p. + append., eng] 41-3365
- McAvoy, J.G.**  
"NAV-ICE"—an integrated system for ice navigation [1986, p.457-466, eng] 41-1612
- McBean, G.**  
Atmospheric boundary layer [1986, p.333-337, eng] 41-2989
- McBean, G.A.**  
Composition of snow in Pacific coastal mountains [1986, p.1161-1164, eng] 41-794
- McBride, N.**  
Municipal decision making and the role of salt in snow and ice control in Ontario [1979, 68p., eng] 41-236
- McCabe, A.M.**  
Glaciomarine facies deposited by retreating tidewater glaciers: an example from the Late Pleistocene of northern Ireland [1986, p.880-894, eng] 41-1862
- McCallum, J.S.**  
Dynamic ship/ice impact—results of parametric model testing [1986, p.349-363, eng] 41-1604
- McCann, S.B.**  
Sea ice breakup and tidal flats processes, Frobisher Bay, Baffin Island [1986, p.168-180, eng] 41-362
- McClung, D.M.**  
Effects of free water on snow gliding [1987, p.6301-6309, eng] 41-3644  
Statistical and geometrical definition of snow avalanche run-out [1987, p.107-119, eng] 41-4488
- McClung, J.E.**  
Predicting settlement at a damsite on a tunnel valley deposit in Alberta [1987, p.45-57, eng] 41-2978
- McComber, P.**  
Analysis of selected ice accretion measurements on a wire at Mt. Washington [1985, p.34-43, eng] 41-1482  
Atmospheric icing load measurements on a cable using the end tension [1987, p.131-141, eng] 41-4490
- McConville, M.J.**  
Patterns of carbon assimilation in a microalgal community from annual sea ice, East Antarctica [1985, p.135-141, eng] 41-1629
- McCormick, M.P.**  
Characteristics of Arctic polar stratospheric clouds as measured by airborne lidar [1986, p.2149-2161, eng] 41-2550  
Formation of polar stratospheric clouds [1983, p.2055-2067, eng] 41-2004
- McCoy, W.D.**  
Five-year growth of rock lichens in a low-Arctic mountain environment, northern Labrador [1986, p.85-91, eng] 41-2707
- McDaniel, O.H.**  
Relationship between micrometeorology and sound propagation above snow-covered and ground surfaces. Final report [1986, 59p., eng] 41-242
- McDonald, D.B.**  
Hail to rain conversion through melting [1984, p.275-278, eng] 41-4399
- McDonnell, J.J.**  
Effects of varying snowpack and watershed conditions on snowmelt runoff response [1985, p.262-266, eng] 41-1502  
Modelling the areal depletion of a snowcover in a forested catchment [1987, p.43-60, eng] 41-3405  
Snowpack depletion in a forested catchment [1985, p.267-271, eng] 41-1503
- McDougall, K.**  
Micropaleontology and sedimentology of the PB borehole series, Prudhoe Bay, Alaska [1986, 62p. + 14 plates, eng] 41-4600
- McElroy, D.L.**  
Analysis of transient heat transfer measurements on porous thermal insulations [1986, p.703-708, eng] 41-3290
- McEwan, C.**  
Late Quaternary moraines in the Chimborazo area, Ecuador [1985, p.135-142, eng] 41-1225
- McFarland, M.J.**  
Nimbus 7 SMMR investigation of snowpack properties in the northern Great Plains for the winter of 1978-79 [1987, p.35-46, eng] 41-3314
- McFarquhar, G.M.**  
On the width and motion of a rain/snow boundary [1987, p.343-350, eng] 41-2651
- McGonigal, D.**  
Ice stress panel results, Issungnak 1980 [1981, 14p. + figs., eng] 41-3553  
Incursion of Alaskan multiyear ice features and their associated scour in the Canadian Beaufort Sea [1986, p.51-59, eng] 41-3091  
Natural shoal rubble pile study, Beaufort Sea, March-April 1979 [1986, 36p. + figs., append., eng] 41-3548  
Rubble field study, Issungnak, 1979-80. Vol.1. Executive summary report [1983, 38p., eng] 41-3549
- McGrath Grossi, S.**  
Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover [1987, p.153-164, eng] 41-3131  
Sea ice microbial communities. 8. Bacterial production in annual sea ice of McMurdo Sound, Antarctica [1987, p.175-186, eng] 41-3133
- McGraw, J.B.**  
Experimental ecology of *Dryas octopetala* ecotypes. 3. Environmental factors and plant growth [1985, p.229-239, eng] 41-1244
- McGreedy, J.P.**  
Rock moisture content and frost weathering under natural and experimental conditions: a comparative discussion [1985, p.337-346, eng] 41-1252
- McGrew, S.**  
Microwave dielectric, structural, and salinity properties of simulated sea ice [1986, p.832-839, eng] 41-2297  
Structure and dielectric properties at 4.8 and 9.5 GHz of saline ice [1986, p.14,281-14,303, eng] 41-1857
- McGuffie, K.**  
Illustration of the influence of shadowing on high latitude information derived from satellite imagery [1986, p.1359-1365, eng] 41-2140
- McGurk, B.J.**  
Snow redistribution: strip cuts at Yuba Pass, California [1987, p.285-295, eng] 41-4318
- McInnes, B.J.**  
Modelling the response of the West Antarctic Ice Sheet to a climatic warming [1987, p.321-358, eng] 41-3287
- McIntosh, I.**  
Caisson wellheads allow for future use of offshore exploration wells [1987, p.81-85, eng] 41-2571
- McIntosh, R.E.**  
Passive microwave spectral emission from saline ice at C-band during the growth phase [1986, p.840-848, eng] 41-2298
- McIntosh, W.C.**  
Re-interpretation of glaciovolcanic interaction at Mount Takah and Mount Murphy, Marie Byrd Land, Antarctica [1985, p.57-59, eng] 41-2624
- McIntyre, N.F.**  
Antarctic ice sheet topography and surface-bedrock relationships [1986, p.124-128, eng] 41-753
- Mapping of Amery Ice Shelf, Antarctica, surface features by satellite altimetry [1987, p.183-188, eng] 41-4455**  
**Observation of a giant antarctic tabular iceberg by satellite radar altimetry [1987, p.458-462, eng] 41-3677**  
**Seasat altimeter observations of an antarctic "lake" [1987, p.55-59, eng] 41-4435**  
**Surface topography of large ice masses from Landsat imagery [1987, p.16-23, eng] 41-3591**
- McKay, C.P.**  
Comment on "Oxygen budget of a perennially ice-covered antarctic lake [and Reply] [1987, p.520-521, eng] 41-4226
- Cryptoendolithic microbial environment in the Ross desert of Antarctica: satellite-transmitted continuous nanoclimatic data, 1984 to 1986 [1987, p.273-287, eng] 41-4627**  
**Method for the continuous monitoring of snow: application to the cryptoendolithic microbial community of Antarctica [1985, p.179-181, eng] 41-3322**  
**Perennial N<sub>2</sub> supersaturation in an antarctic lake [1987, p.343-345, eng] 41-2506**
- McKeehan, D.S.**  
Marine pipeline design in ice environments [1986, p.9-17, eng] 41-3087
- McKendrick, J.D.**  
Final cleanup at selected (1975-1981) wellsites, sampling and testing of water and bottom muds in the reserve pits and the recording of tundra plant responses on the National Petroleum Reserve in Alaska (NPPRA). Vol.3 Recording of tundra plant responses [1986, 225p., eng] 41-2452
- McKenna, C.**  
Reference guide for building diagnostics equipment and techniques [1986, 148p., eng] 41-3359
- McKenzie, G.D.**  
Development of collapsed glacial topography in the Adams Inlet, Alaska, U.S.A. [1987, p.55-59, eng] 41-3596  
Observed processes of glacial deposition in Glacier Bay, Alaska [1986, 167p., eng] 41-2974
- McKim, H.L.**  
Evaluation of SPOT HRV simulation data for Corps of Engineers applications [1985, p.61-71, eng] 41-1917
- McKinnon, W.B.**  
Geology of icy satellites [1985, p.829-856, eng] 41-1741
- McLaren, A.S.**  
Analysis of the under-ice topography in the Arctic basin as recorded by USS *Nautilus* in 1958 and USS *Queenfish* in 1970 [1986, 163p., eng] 41-1932  
Evolution and potential of the Arctic submarine [1985, p.448-453, eng] 41-226  
Ice thickness measurements in the Arctic Ocean—a preliminary assessment based on digitization of submarine under ice sonar data [1986, p.225-235, eng] 41-2661  
Under-ice topography of the Arctic Basin as recorded in 1958 and 1970: a comparison [1986, p.165-191, eng] 41-2658
- McLeod, N.W.**  
Pen-Vis number (PVN) as a measure of paving asphalt temperature susceptibility and its application to pavement design [1987, p.147-240, eng] 41-4024
- McLuckie, R.F.**  
Performance of high ratio recycled pavements in northern Ontario [1987, p.829-865, eng] 41-4045
- McMartin, I.**  
Morphosedimentary zones in the Bluenose Lake region, District of Mackenzie [1987, p.89-100, eng] 41-4010
- McMurtrey, E.L.**  
Evaluation of grease type ball bearing lubricants operating in various environments. Final status report [1984, 18p., eng] 41-3041
- McNaughton, B.**  
Dissolved-oxygen depressions under ice cover in two Yukon rivers [1986, p.1675-1679, eng] 41-1863
- McPartland, J.T.**  
Liquid water limitation to ice particle growth in Montana cumulus congestus clouds [1982, p.350-353, eng] 41-32
- McPhee, M.G.**  
Boundary layer, upper ocean, and ice observations in the Greenland Sea marginal ice zone [1987, p.6987-7011, eng] 41-4255  
Dynamics and thermodynamics of the ice/upper ocean system in the marginal ice zone of the Greenland Sea [1987, p.7017-7031, eng] 41-4257  
Forecasting summer ice conditions in the Beaufort Sea [1987, p.371-377, eng] 41-2445  
Ice-seawater turbulent boundary layer interaction with melting or freezing [1986, p.1829-1846, eng] 41-2219  
Note on estimating melt rate in the MIZ [1986, p.1-6, eng] 41-3053  
Time-dependent model for turbulent transfer in a stratified oceanic boundary layer [1987, p.6977-6986, eng] 41-4254  
Upper ocean [1986, p.339-394, eng] 41-2990
- McRae, D.M.**  
Management of Arctic marine transportation: a Canadian perspective [1986, p.350-359, eng] 41-2691
- McRoberts, E.C.**  
Monitoring of thawing permafrost slopes: interprovincial pipe line [1986, p.133-151, eng] 41-2520

- McTaggart, K.A.**  
Wind/wave tank tests of drifting iceberg models [1986, p.364-379, eng] 41-1107
- Mead, L.B.**  
Comparison of experimental and computer modeling of snow-block impact on structures [1986, p.321-324, eng] 41-4283
- Medvedev, M.I.U.**  
Winter migration of soil water in the Devitsa River basin [1985, p.90-104, rus] 41-2731
- Medvedev, V.S.**  
Shelf: the relief, sediments and their formation [1987, 205p. (Pertinent p.53-80), rus] 41-3688
- Medvedskii, R.I.**  
Experience in casing wells in permafrost layers [1987, p.62-65, rus] 41-3774  
Influence of the aqueous-phase pressure on the freezing and thawing of pore moisture in highly disperse media [1986, p.543-549, eng] 41-1894
- Meehan, R.H.**  
Impact of oilfield development on shorebirds, Prudhoe Bay, Alaska [1986, 92p., eng] 41-2287
- Meeting of the Ice Research Laboratory, Thayer School of Engineering, Dartmouth College, Hanover, NH, 1st, Oct. 2 and 3, 1985**  
Agenda and presentations [1986, Var.p., eng] 41-2129
- Meeting of the Pacific Division, AAAS 67th, and the 1986 Meeting of the Arctic Science Conference (Arctic Division, AAAS), Vancouver, B.C., June 8-13, 1986**  
Proceedings [1986, 55p., eng] 41-830
- Mehays, G.R.**  
Seasonal variation of soil erosion by water in southwestern Quebec [1987, p.55-63, eng] 41-2726
- Meler, M.F.**  
Bed topography inferred from airborne radio-echo sounding of Columbia Glacier, Alaska [1986, 26p., eng] 41-2119  
Photogrammetric determination of surface altitude, terminus position, and ice velocity of Columbia Glacier, Alaska [1985, 41p. + 8 maps, eng] 41-3403
- Meijer, P.H.E.**  
Extended lattice model of water: two-sublattice, two-orientation model [1982, p.124-142, eng] 41-2245
- Meininger, R.**  
Laboratory evaluation of the freezing and thawing durability of marine limestone coarse aggregate in concrete [1987, p.1311-1323, eng] 41-3728
- Meister, R.**  
Snow and avalanche conditions in the Swiss Alps [1986, p.45-106, ger] 41-2292
- Mekhov, K.S.**  
Methods of making artificial snow and its physical properties [1986, p.84-87, rus] 41-2159
- Mekler, Y.**  
Sputtering of water ice at 30-140 K by 0.5-6.0 keV H(+) and Ne(+) ions [1985, p.287-299, eng] 41-1708
- Meldrum, R.D.**  
Measuring glacier-motion fluctuations using a computer-controlled survey system [1986, p.727-733, eng] 41-1931
- Melekestsev, I.V.**  
Volcanism and glaciers in the Anthropogene [1986, p.27-35, rus] 41-102
- Melent'ev, V.V.**  
Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan [1986, p.21-23, eng] 41-2941
- Mellberg, L.E.**  
Modeled acoustic propagation through an ice edge eddy in the Fram Strait and Sea marginal ice zone [1987, p.6857-6868, eng] 41-4243
- Mellor, A.**  
Textural and scanning electron microscope observations of some arctic-alpine soils developed in Weichselian and Neoglacial till deposits in southern Norway [1986, p.327-336, eng] 41-1180
- Mellor, G.L.**  
Ice-seawater turbulent boundary layer interaction with melting or freezing [1986, p.1829-1846, eng] 41-2219
- Mellor, M.**  
Blasting and blast effects in cold regions. Part 2: underwater explosions [1986, 56p., eng] 41-3020  
Concentration and flux of wind-blown snow [1986, 16p., eng] 41-3928  
Deviation of guidelines for blasting floating ice [1987, p.193-206, eng] 41-4495  
Drill bits for frozen fine-grained soils [1986, 33p., eng] 41-2610  
Equipment for making access holes through arctic sea ice [1986, 34p., eng] 41-3819  
Mechanical behavior of sea ice [1986, p.165-281, eng] 41-2988  
Revised guidelines for blasting floating ice [1986, 37p., eng] 41-3814  
Some developments in shaped charge technology [1986, 29p., eng] 41-3049  
Some developments in shaped charge technology [1986, p.575-604, eng] 41-2678
- Mel'nikov, E.S.**  
Compilation of a regional geocryological forecast based on small-scale maps of natural complexes in the cryolithozone of western Siberia [1986, p.53-67, rus] 41-3486
- Mel'nikov, I.A.**  
Conditions of ice-flora habitat in the central part of the Arctic Ocean [1986, p.59-62, rus] 41-4197
- Mel'nikov, P.I.**  
Cryosphere and the zonality of soil melioration processes [1986, p.94-98, rus] 41-4468  
Methods of predicting destructive cryogenic phenomena associated with the development of an area from the example of NW Siberia [1986, p.44-49, eng] 41-1791
- Mel'tser, M.S.**  
Experience in casing wells in permafrost layers [1987, p.62-65, rus] 41-3774
- Menco, B.P.M.**  
Survey of ultra-rapid cryofixation methods with particular emphasis on application to freeze-fracturing, freeze-etching, and freeze-substitution [1986, p.177-240, eng] 41-1014
- Mende, S.B.**  
Development of an automatic geophysical observatory [1985, p.229-231, eng] 41-3326
- Mendis, D.A.**  
Effect of dust halos and dust mantles on nuclear outgassing [1985, p.487-504, eng] 41-1720
- Menegus, F.**  
Building yard trials for avalanche protection structures [1986, p.28-36, ita] 41-2235  
Criteria for scaling rock at avalanche defense structures [1986, 146p., ita] 41-2568
- Meneley, R.A.**  
Oil and gas fields in the East Coast and Arctic basins of Canada [1986, p.143-176, eng] 41-2608
- Meng, F.**  
Growth rate of frost formation through sublimation—a porous medium physical model of frost layers [1987, p.584-593, eng] 41-3402
- Menon, B.**  
Manoeuvring tests in ice aboard USCGC *Polar Star* in Antarctica, 1985 [1986, 44p. + 1 append., eng] 41-3373  
Model studies of ice interaction with ship rudders and steering systems [1986, 2 vols., eng] 41-3372  
Summary of the results of the Canadian participation in the Polar Class trafficability program, 1981-1985 [1986, 63p., eng] 41-3028
- Men'shchikov, V.A.**  
Results of sounding Altai glaciers with a portable radar [1986, p.116-121, rus] 41-1650
- Menshutina, V.M.**  
Variations of mass balance components of valley glaciers in temperate latitudes of the USSR [1986, p.112-116, 229-233, eng] 41-1064
- Mercer, B.**  
Integrated ice monitoring system for Arctic offshore drilling [1986, p.107-118, eng] 41-1093
- Mercer, C.L.**  
Operating and design considerations for Antarctic resupply vessels [1986, p.531-547, eng] 41-2044
- Mercer, J.B.**  
Advanced radar systems for support of Arctic marine operations [1986, p.839-858, eng] 41-2061
- Merkulov, V.A.**  
Working conditions of power transmissions of ice-navigating ships [1986, p.3-8, rus] 41-3386
- Merkushov, N.V.**  
Modeling the road icing process [1986, p.77-78, rus] 41-2383
- Merrick, P.E.D.**  
Fire protection engineering considerations in the design of Arctic fixed and floating offshore structures [1986, p.223-237, eng] 41-2276  
Fire protection engineering techniques for hazard/risk reduction in modular Arctic facilities [1986, p.238-250, eng] 41-2277
- Merry, C.J.**  
Description of the building materials data base for Cincinnati, Ohio [1986, 85p., eng] 41-3498  
Description of the building materials data base for Portland, Maine [1986, 83p., eng] 41-662  
Evaluation of SPOT HRV simulation data for Corps of Engineers applications [1985, p.61-71, eng] 41-1917  
Instructions for completing a field worksheet for inventorying building materials [1986, 25p., eng] 41-2530
- Merwald, I.**  
Avalanche statistics in Austria [1984, p.191-204, ger] 41-714
- Merzlikin, V.G.**  
Theory of radiative-convective mechanism of subsurface heating and melting of snow and ice [1986, p.27-38, rus] 41-1634
- Meshchenin, I.G.**  
Water transfer processes and indication of underlying surface saturation by remote sensing [1986, p.45-55, rus] 41-2735
- Meslats, S.P.**  
Experiments with joint action of vermiculite-based sorbents and the Barents Sea strains of petroleum oxidizing bacteria [1986, p.178-180, rus] 41-2391
- Using natural sorbents in removing oil spills from surfaces of northern seas [1986, p.181-183, rus] 41-2393**
- Metcalfe, R.C.**  
Accuracy of pH determination in glacial melt-waters [1984, p.41-51, eng] 41-624  
Cationic denudation rate of an alpine glacial catchment: Gornegletscher, Switzerland [1986, p.19-22, eng] 41-3523
- Metcalfe, J.R.**  
Design, instrumentation and operation of a snowmelt runoff plot [1984, p.219-223, eng] 41-1963  
Snowmelt acidic shock study in south central Ontario [1986, p.131-138, eng] 41-2618
- Meyer, A.**  
Importance of the surface layer for the durability of concrete structures [1987, p.49-61, eng] 41-3691
- Meyer, F.**  
Cold climate performance of Canadian airport pavements [1987, p.303-332, eng] 41-4027
- Meyer, M.**  
Winter operating safety of tunnel water lines [1986, p.324-326, ger] 41-1564
- Meysaonnier, J.**  
Ice flow over a bed of simple form: experiment, modeling, parametrization of friction [1983, 358p., fre] 41-3557
- Michaels, D.**  
Russian-English Arctic environment glossary [1987, 219p., eng] 41-2887
- Michaud, J.**  
Isotopic composition and origin of lacustrine brines in the Arctic [1987, p.210-216, eng] 41-4078
- Michel, B.**  
High speed borehole pressuremeter to measure the crushing strength of ice [1986, p.187-208, eng] 41-1392  
Intrinsic curve of ice under compression [1987, p.(C1)322-(C1)327, fre] 41-4328  
Yield and failure envelope for ice under multiaxial compressive stresses [1986, p.75-82, eng] 41-1306  
Yield envelope for confined ice [1986, p.25-36, eng] 41-1580
- Michel, F.A.**  
Stratigraphic, isotopic, and mineralogical evidence for an early Holocene thaw unconformity at Mayo, Yukon Territory [1986, p.794-803, eng] 41-2684
- Michtsch, J.**  
Ground aircraft deicing technology review [1986, var.p., eng] 41-3378
- Michkov, V.I.**  
Construction of electric power lines for main pipelines. Manual [1986, 164p. (Pertinent p.127-138), rus] 41-2890
- Middleton, D.**  
Performance parameters for quasi canonical class A non-Gaussian noise: source distribution law  $\mu = 0$ , propagation law gamma = 2 [1986, 161p., eng] 41-2072
- Midthun, K.H.**  
Polar low forecasting [1986, p.257-271, eng] 41-1809
- Migala, K.**  
Deflation and nival eolian phenomena observed under conditions of congelation in the forefield of the Werenskiöld Glacier (SW Spitsbergen) [1984, p.197-206, eng] 41-635
- Migliachenko, V.P.**  
Chemical method of treating soils [1986, p.17-18, rus] 41-2556  
Sodium nitrite water solutions used in the construction of roadbeds for forest roads [1986, p.100-103, rus] 41-1397
- Mikhailichenko, V.**  
Operations with icebreaking cargo vessels on the Northern Sea Route [1986, p.792-804, eng] 41-2058
- Mikhailov, A.I.U.**  
Alimentation intensity of Late Pleistocene glaciers in the eastern half of the USSR [1986, p.56-64, rus] 41-1638
- Mikhailov, A.V.**  
Structural heat-engineering for road pavements [1986, 149p., rus] 41-2210
- Mikhailov, I.I.**  
Calculating wind loads on power line supports, allowing for icing [1986, p.66-68, rus] 41-885
- Mikhailov, I.U.P.**  
Some problems in rationalizing the use of natural resources in the BAM zone [1986, p.35-44, rus] 41-2248
- Mikhailov, M.**  
Low temperature X-ray analysis of water/poly(oxyethylene) systems [1986, p.628-634, eng] 41-2573
- Mikhailovskii, G.V.**  
Geophysical research for the construction of hydraulic structures in permafrost areas [1986, p.76-83, rus] 41-3449
- Mikheenko, V.V.**  
Stand for accelerated tests of bulldozer engine life [1978, p.78-82, rus] 41-1326
- Mikheev, N.I.**  
Fir trees [1986, 238p., rus] 41-2259
- Mikhlevsky, P.N.**  
Ocean dynamics and acoustic fluctuations in the Fram Strait marginal ice zone [1987, p.435-436, eng] 41-2805

- Mikhaevskii, N.D.**  
Studies of electromagnetic irradiance in the radio-frequency range during avalanche movement [1985, p.31-34, rus] 41-841
- Mikhaev, S.M.**  
Cryogenic structure of linear weathering crusts in the Stanovoi Range [1986, p.74-78, rus] 41-2822
- Mikulec, D.**  
Theoretical aspect and methods of testing concrete resistance to freezing and deicing chemicals [1987, p.947-971, eng] 41-3715
- Milburn, D.**  
Drilling mud usage and discharge in arctic marine waters north of 60 deg for the period 1978-1982 [1985, 6p. + appends, eng] 41-596  
Summary report: drilling fluid use and waste discharge in arctic marine waters north of 60 deg for 1983 [1986, 38p., eng] 41-597  
Summary report: drilling fluid use and waste discharge in arctic marine waters north of 60 deg for 1984 [1986, 47p., eng] 41-598
- Miles, D.W.R.**  
Freezing technique for sampling skeletal, structureless forest soils [1986, p.1640-1642, eng] 41-2693
- Miles, R.T.**  
Project ice buster [1986, p.623-643, eng] 41-2681
- Miley, J.M.**  
1985 field studies, Beaufort and Chukchi Seas, conducted from the NOAA ship *Discoverer* [1986, 57p. + figs., eng] 41-831
- Milko, R.**  
Potential ecological effects of the proposed GRAND canal diversion project on Hudson and James Bays [1986, p.316-326, eng] 41-2690
- Mill, P.A.D.**  
Overall building enclosure evaluation in cold climates: a generic methodology for field measurement [1986, p.510-524, eng] 41-1385
- Miller, T.B.**  
Australia, Britain, and Antarctica [1986, 111p., eng] 41-2597
- Miller, J.D.**  
Acoustic noise measurements of icebergs [1985, p.460-463, eng] 41-228  
Ice management on the Grand Banks [1985, p.416-419, eng] 41-220  
Iceberg detection by radar [1985, p.405-410, eng] 41-218  
Sea ice drift measurements using satellite-tracking beacons [1986, p.583-597, eng] 41-168
- Miller, J.M.**  
Enhancing Landsat data acquired under very low illumination [1986, p.801-807, eng] 41-2741
- Miller, M.E.**  
Aerosol size distributions in the marginal ice zone during the 1983 Marginal Ice Zone Experiment [1987, p.6971-6976, eng] 41-4253
- Miller, S.G.**  
Clathrate hydrates in the solar system [1985, p.59-79, eng] 41-1697
- Miller, S.W.**  
Ice nucleus measurement intercomparisons using three systems and three natural ice nucleants [1982, p.119-122, eng] 41-11
- Milligan, V.**  
Use of insulation to provide frost protection for the Waterloo Dam in northern Saskatchewan [1982, p.437-449, eng] 41-3751
- Millimeter Wave Technology, Inc.**  
Ice pavement detection system; Phase 1, SBIR [1987, 125p., eng] 41-3027
- Mills, R.L.**  
Experimental evidence for a second-order transformation prior to melting in ammonia, organic compounds and ice I [1986, p.949-961, eng] 41-1864
- Milner, G.A.**  
Automatic low-temperature calorimeter [1986, p.1456-1459, eng] 41-995
- Milokhin, S.E.**  
Prospects for using gas-thermal methods of strengthening and rebuilding details of equipment designed for the North [1985, p.116-119, rus] 41-2853
- Minakov, V.M.**  
Using the UBM-20A assembly for drilling large-diameter wells in permafrost [1986, p.24-27, rus] 41-2533
- Minasian, D.T.**  
Prevention and retardation of ice formation at sea [1986, p.283-295, eng] 41-938
- Minervin, A.V.**  
Conditions for the development of Late Pleistocene cryogenic formations in the central Russian plain [1986, p.90-100, rus] 41-4469
- Misetti, G.**  
Ski areas and roads protected by precautionary defense from avalanches [1987, p.47-50, ita] 41-4105
- Minion, R.**  
Building construction in cold climates [1985, 79p., eng] 41-824  
Glacial deposition including moraines, drumlins and eskers [1985, 98p., eng] 41-825
- Offshore development in northern Canada and Alaska** [1985, 83p., eng] 41-823
- Minkin, M.A.**  
Determination of the bearing capacity of piles in permafrost by static penetration [1986, p.58-63, eng] 41-1850
- Minnich, R.A.**  
Snow levels and amounts in the mountains of southern California [1986, p.37-58, eng] 41-2699
- Minsk, L.D.**  
Chemical solutions to the chemical problem [1985, p.238-244, eng] 41-3194
- Mints, V.M.**  
Lift-slab method of erecting a 30-story building in Krasnoyarsk [1986, p.1-16, rus] 41-888
- Miotke, F.-D.**  
Dunes in Victoria Valley, Victoria Land: a report on eolian formation in extremely cold climates [1985, p.79-125, ger] 41-3252
- Mironburg, I.U.S.**  
Interaction of thermophiles with artificially frozen bases [1983, p.82-88, rus] 41-4478
- Mironov, B.A.**  
Hydrological role of the Bilimbaev forests [1986, p.73-88, rus] 41-2876  
Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilimbaev experimental forest taken as an example) [1986, 158p., rus] 41-2873
- Mironov, E.U.**  
Estimation of sea ice volume in the Arctic Ocean, allowing for pressure ridges [1986, p.69-72, rus] 41-1640  
Studying anomalously high ice drift velocities in Arctic seas [1986, p.57-60, eng] 41-1691
- Mironov, N.G.**  
Interactions between "cold" gas pipelines and freezing ground in the Far North [1986, p.42-43, rus] 41-3976
- Mironov, V.P.**  
Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams [1986, p.3-7, rus] 41-4547
- Mironova, E.M.**  
Mathematical modeling for determining avalanche spread boundaries [1986, p.78-81, rus] 41-1642
- Mirtskhalava, Z.I.**  
Indicators of the state of ultimate balance of a mudflow [1985, p.373-376, eng] 41-1625
- Mirza, F.A.**  
Finite-element simulation of the thermal regime of the Erebus Glacier Tongue, Antarctica [1986, p.530-534, eng] 41-4309
- Mirzoev, D.A.**  
Main trends of the offshore oil and gas production structures—development for the freezing sea conditions [1986, p.160-166, eng] 41-2271  
Properties of salt water ice as material for artificial islands construction [1986, p.187-194, eng] 41-2274
- Mishima, O.**  
High-density amorphous ice. 3. Thermal properties [1986, p.2766-2770, eng] 41-2570  
Raman spectrum of high-density amorphous ice [1986, p.475-478, eng] 41-892
- Mishon, M.**  
Influence of forestry and forest complexes on river runoff [1986, p.71-75, rus] 41-1368
- Miskolezy, G.**  
Heat pipe deicing apparatus [1981, 6 col., eng] 41-1673
- Misnik, I.U.M.**  
Improving the low-mines frequency of grooves-sampling in northern mines [1986, p.10-15, rus] 41-4549
- Mitchell, C.**  
Patterns of carbon assimilation in a microalgal community from annual sea ice, East Antarctica [1985, p.135-141, eng] 41-1629
- Mitchell, J.C.**  
Dynamic recrystallization and fabric development during the simple shear of ice [1986, p.857-870, eng] 41-2809  
Origin of kinks in polycrystalline ice [1986, p.27-48, eng] 41-1036
- Mitchell, J.F.B.**  
Sea-ice and the antarctic winter circulation: a numerical experiment [1986, p.953-969, eng] 41-1474
- Mitchell, J.G.**  
Archaeomicon (Chrysophyta) cysts: ecological and paleoecological significance [1986, p.289-298, eng] 41-4609
- Mitchev, P.V.**  
Law observed in the generation of sound in ice samples subjected to loading [1986, p.168-169, rus] 41-3240
- Mitnik, L.M.**  
Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes [1986, p.93-97, rus] 41-2720
- Mitrakov, V.I.**  
Chemical stabilization of noncohesive soils [1986, p.25-27, rus] 41-1528
- Mitrofanov, D.P.**  
Estimating the productivity of northern taiga forests in Siberia [1984, p.95-102, rus] 41-1082
- Mitsunaga, Y.**  
Transmission loss of coated single-mode fiber at low temperatures [1980, p.4200-4205, eng] 41-264
- Mitten, P.T.**  
Ice data management for support of offshore operations [1986, p.195-222, eng] 41-2275
- Miyazima, S.**  
Simulation for growth of snowflake [1987, p.441-443, eng] 41-3968
- MIZEX—a program for mesoscale air-ice-ocean interaction experiments in Arctic marginal ice zones.** MIZEX bulletin 7
- MIZEX—a program for mesoscale air-ice-ocean interaction experiments in Arctic marginal ice zones.** MIZEX bulletin 7 [1986, 88p., eng] 41-3052
- Mizikos, J.P.**  
Ice design of multi-legged structures [1986, p.735-748, eng] 41-1129  
Level ice indentation on a pile array [1987, p.273-279, eng] 41-2432
- Mizoguchi, M.**  
Simultaneous change of water content, solute and temperature profiles in a partially frozen unsaturated soil [1986, p.11-17, jpn] 41-3750
- Mizoguchi, K.**  
Hydraulic conveying of snow. 9. Development of techniques for high snow concentration [1987, p.59-66, jpn] 41-4320
- Mizuno, M.**  
Melting of horizontal ice layer from above by combined effect of temperature and concentration of aqua-silvent [1987, p.227-232, eng] 41-3963
- Mizuno, Y.**  
Dynamical properties of ice surfaces studied by nuclear magnetic resonance [1986, p.1-10, jpn] 41-3874  
Electrical conductivity of snow cover and solid precipitation in Sapporo 1985-86 [1986, p.11-15, jpn] 41-3502  
Report of pit-wall observations of snow cover in Sapporo [1986, p.1-10, jpn] 41-3501
- Mizutani, K.**  
Evaluation of durability for concrete in terms of watertightness by "permeability coefficient test results" [1987, p.187-206, eng] 41-3694
- Mkrtchian, G.P.**  
Meltwater streams as the cause of soil erosion [1986, p.108-114, rus] 41-814
- Mnushkin, M.G.**  
Peculiarities of simultaneous calculation of a nonstationary temperature field and the stress-strain state of freezing and thawing massive ground [1986, p.96-106, rus] 41-3452
- Moallemi, M.K.**  
Analysis of melting around a moving heat source [1986, p.1271-1282, eng] 41-394  
Experiments on melting of unfixed ice in a horizontal cylindrical capsule [1987, p.454-459, eng] 41-3756
- Mochalov, V.I.**  
Cryogenic preparation of cohesive rocks [1986, p.15-17, rus] 41-3768  
Thermal break-up of frozen cohesive rocks [1986, p.68-69, rus] 41-3765
- Mochalov, V.P.**  
Glacial floods and their control [1986, p.104-108, 216-219, rus] 41-4351
- Mode, W.N.**  
Contemporary pollen deposition and the distribution of *Betula glandulosa* at the limit of low arctic tundra in southern Baffin Island, N.W.T., Canada [1985, p.279-287, eng] 41-1249
- Moe, R.L.**  
Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover [1987, p.153-164, eng] 41-3131  
Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of arctic sea ice microalgal communities [1987, p.165-173, eng] 41-3132
- Moeri, T.**  
Winter dye tracer experiments on the Findelengletscher (Canton Wallis, Switzerland) [1986, p.33-41, eng] 41-3524
- Mogensen, O.E.**  
On positronium formation in crystalline and amorphous ice at low positron energy [1986, p.357-362, eng] 41-3070
- Mohsen, A.S.S.**  
Proceedings [1986, 74p., eng] 41-1034
- Mollanen, I.A.**  
Ships used in the exploitation of offshore deposits [1987, p.221-231, rus] 41-4147
- Moiseev, N.N.**  
Mathematical modelling. Processes in complex economic and ecological systems [1986, 295p., rus] 41-547
- Moiseichik, E.K.**  
Effective foundations for agricultural buildings on frost-heaving ground [1985, p.22-23, rus] 41-284
- Molenkamp, C.R.**  
Simple model of stratified precipitation for scavenging studies [1982, p.63-65, eng] 41-5



- Mollard, J.D.**  
Predicting settlement at a damsite on a tunnel valley deposit in Alberta [1987, p.45-57, eng] 41-2978
- Monaghan, M.C.**  
Greenland ice 10Be concentrations and average precipitation rates north of 40 deg N to 45 deg N [1987, p.197-203, eng] 41-4279
- Mondrick, A.**  
Survivability of Army fiber optics systems [1981, p.110-117, eng] 41-583
- Mosinger, W.R.**  
Cloud particle identification near the melting layer with dual polarization K-band doppler radar [1982, p.412-415, eng] 41-46
- Moak, G.A.**  
Examples of the operational utility of radar observations of cold air vortices [1986, p.247-256, eng] 41-1808
- Monoosov, L.M.**  
Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice [1986, p.153-158, rus] 41-2169
- Mostagne, D.C.**  
Wind tunnel investigation on the riming of snowflakes, Parts 1 and 2 [1986, p.2392-2417, eng] 41-2360
- Moore, P.J.**  
Casey snow runway data report, 1983-84 [1984, 98p., eng] 41-4526  
Casey snow runway tests, 1983-84 [1984, 111p., eng] 41-4527
- Moore, R.K.**  
Microwave remote sensing—active and passive [1981, 216p., (3 vols.), eng] 41-1508
- Moorhead, D.L.**  
Development and application of an upland boreal forest succession model [1985, 170p., eng] 41-2584
- Moran, K.**  
Analysis of potential slope instability due to wave loading on the Nova Scotian shelf [1986, p.980-999, eng] 41-3171  
Documentation of iceberg groundings [1986, p.194-199, eng] 41-3110  
Geotechnical aspects of the DIGS experiment [1986, p.143-147, eng] 41-3104
- Moran, M.J.**  
Simultaneous heat and mass transfer in soil with application to waste heat utilization [1978, p.19-24, eng] 41-465
- Mordukhovich, I.M.**  
Improving thermal insulation of building walls [1986, p.53-60, rus] 41-2920
- Mordvinov, A.A.**  
Lacustrine and river geosystems of the Oktyabr'skaya Revolyutsiya Islands (Severnaya Zemlya) [1986, p.30-41, rus] 41-3864
- Morera, T.A.**  
Ground-based system for sensing radiometric properties of snow, ice, and water [1986, p.971-980, eng] 41-3992
- Morelino, F.A.**  
Architectural and structural type of the 1986-1995 models of refueling-tankers [1984, p.19-29, rus] 41-541
- Morev, V.A.**  
Some problems of building ice foundations in freezing seas [1986, p.162-166, rus] 41-2171  
Technical means for thermal drilling and cutting of ice [1986, p.37-39, rus] 41-2151
- Moroy, R.M.**  
Electromagnetic property trends in sea ice, Part 1 [1987, 45p., eng] 41-4368  
Modeling the electromagnetic property trends in sea ice and example impulse radar and frequency-domain electromagnetic ice thickness sounding results [1986, p.57-133, eng] 41-2655
- Morgan, G.W.**  
Ice disaggregation system [1982, 8 col., eng] 41-1676  
Means for increasing the efficiency of an ice disaggregation system [1983, 8 col., eng] 41-1677
- Morgan, P.W.**  
Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program [1986, 195p., eng] 41-3030
- Morgan, V.**  
Methanesulphonate in antarctic ice [1986, p.375-379, eng] 41-2503
- Morgan, V.I.**  
Ice-core drilling site at Law Dome summit, Wilkes Land, Antarctica [1986, 34p., eng] 41-459
- Morgenstern, N.R.**  
Creep behaviour of undisturbed clay permafrost [1986, p.515-527, eng] 41-2471  
In situ creep properties in ice-rich permafrost soil [1986, p.504-514, eng] 41-2470
- Mori, N.**  
Study on the improvement of weld properties for ultra-heavy steel plate (HT-50) for offshore structures in frigid regions [1984, p.53-59, eng] 41-1193
- Moria, G.**  
Combination of simulated discharges of hydrological models. Application to the WMO intercomparison of conceptual models of snowmelt runoff [1986, p.21-30, eng] 41-4513
- Morin, H.**  
Vegetation of snow patches, Gulf of Richmond, northern Quebec [1986, p.1515-1524, fr] 41-2367
- Morin, R.**  
Influence of drifting ice on the mineralogic distribution of the sand fraction of the surficial sediments from the coastal zone in the Trois-Pistoles region, Quebec [1985, p.51-56, fr] 41-2286
- Morinaga, Y.**  
Seasonal variation of snowline in Langtang Valley, Nepal Himalayas, 1985-1986 [1987, p.49-63, eng] 41-3915
- Morison, J.**  
Internal waves in the Arctic Ocean: a review [1986, p.1163-1183, eng] 41-3005
- Morison, J.H.**  
Boundary layer, upper ocean, and ice observations in the Greenland Sea marginal ice zone [1987, p.6987-7011, eng] 41-4255  
Dynamics and thermodynamics of the ice/upper ocean system in the marginal ice zone of the Greenland Sea [1987, p.7017-7031, eng] 41-4257
- Morita, T.**  
Sub-Arctic ground improvement using the deep mixing method [1986, p.211-221, eng] 41-1097
- Morita, Y.**  
Balloon observation of aerosols in the antarctic troposphere and stratosphere [1986, p.214-222, eng] 41-1752
- Mortiz, K.**  
Studies on the residual effects of de-icing salts [1986, p.5-12, ger] 41-2325
- Moritz, R.E.**  
Accuracy of surface geostrophic wind forecasts in the central Arctic [1986, p.1135-1161, eng] 41-3004  
On the sea ice budget of the Greenland Sea [1986, p.21-58, eng] 41-144
- Moriwaki, K.**  
Report on the geological, geomorphological, and geodetic field party in the Sør Rondane Mountains, 1986 (JARE-27) [1986, p.246-281, jpn] 41-2695
- Morkovkina, I.K.**  
Using tritium in studying ground ice [1986, p.98-100, rus] 41-113
- Morland, L.W.**  
Plane and radial ice-shelf flow with prescribed temperature profile [1987, p.117-140, eng] 41-3277  
Thermomechanical balances of ice sheet flows [1984, p.237-266, eng] 41-3791  
Unconfined ice-shelf flow [1987, p.99-116, eng] 41-3276
- Mörner, N.-A.**  
Climatic changes on a yearly to millennial basis [1984, 667p., eng] 41-2005
- Moroz, E.V.**  
Heat balance of the non-chernozem zone of the European RS, USSR [1987, p.54-60, rus] 41-4168
- Moroz, V.N.**  
Using the UBM-20A assembly for drilling large-diameter wells in permafrost [1986, p.24-27, rus] 41-2533
- Morozov, V.G.**  
Rational use of shallow foundations on frost-heaving ground [1985, p.16-17, rus] 41-281
- Morozov, V.N.**  
Main pipelines in areas of complicated engineering and geological conditions [1987, 123p., rus] 41-2962
- Morozov, V.V.**  
New and rare species of higher aquatic and hydrophilic plants in eastern Bol'shezemel'skaya tundra [1986, p.1619-1620, rus] 41-3024
- Morozova, G.V.**  
Concretes with polyfunctional admixtures [1985, p.13-17, rus] 41-416  
Methods of estimating the efficiency of new surface-active additives [1985, p.3-9, rus] 41-414  
New compound admixture for highly frost-resistant poured concretes [1986, p.15-16, rus] 41-879
- Morris, D.H.**  
Elastic properties and fracture behavior of graphite/polyimide composites at extreme temperatures [1982, p.73-91, eng] 41-1989
- Morris, E.E.**  
Fibrant wound composite thermal isolator structures for cryogenic dewars and instruments [1982, p.95-109, eng] 41-1990
- Morris, E.M.**  
Snow and ice [1985, p.153-182, eng] 41-648
- Morris, I.**  
Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses [1985, p.146-147, eng] 41-2960
- Morrison, T.B.**  
Some recent studies relating to the determination of pipeline depths [1986, p.295-303, eng] 41-3122
- Morrison, T.L.**  
Comparative tractive performance of microspiced and conventional radial tire designs [1986, 11p., eng] 41-3051
- Morrisey, L.A.**  
Mapping permafrost in the boreal forest with thematic mapper satellite data [1986, p.1513-1520, eng] 41-3472
- Moser, G.**  
Explanatory text to the map of Lewis Glacier, Mount Kenya, 1983 [1984, p.177-195, ger] 41-634
- Mosher, F.R.**  
Interactive snowcover mapping with geostationary satellite data over the western United States [1986, p.1065-1074, eng] 41-3995
- Moshman, J.**  
Benefits and costs in the use of salt to deice highways [1976, 140p., eng] 41-4666
- Mosin, V.D.**  
Failure of frozen soils by high-pressure hydraulic jets in trench and pit construction [1986, p.194-197, eng] 41-2946
- Moskalenko, N.G.**  
Compilation of a regional geocryological forecast based on small-scale maps of natural complexes in the cryolithozone of western Siberia [1986, p.53-67, rus] 41-3486
- Moskaleva, V.F.**  
Mean long-range ice balance of Lake Baykal during the ice breakup period [1982, p.180-187, rus] 41-1277
- Moskalev, A.N.**  
Rock failure under thermo-cyclic loads [1987, 248p., rus] 41-4152
- Moskalev, I.U.D.**  
Avalanches and avalanche snow loads [1986, 157p., rus] 41-651
- Moskalevskii, M.I.U.**  
Mineralogy and morphology of disperse morainal debris on King George and Nelson islands [1984, p.104-110, rus] 41-2358
- Moskvina, V.M.**  
Calculating the frost resistance of concrete [1986, p.7-8, rus] 41-1885
- Mosley-Thompson, E.**  
Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap [1986, p.361-364, eng] 41-2860
- Motovilov, I.U.G.**  
Modeling snow cover during the periods of its formation and melting [1986, p.50-56, rus] 41-1637
- Motoyama, H.**  
Radiation measurements of snowy season in 1986 at Sapporo [1986, p.17-23, jpn] 41-3503  
Studies of basin heat balance and snowmelt runoff models [1986, p.1-53, eng] 41-3845  
Winter runoff in the glacialized drainage basin in Langtang Valley, Nepal Himalayas [1987, p.29-33, eng] 41-3912
- Motylev, I.U.L.**  
Problems in soil stabilization [1986, p.10-11, rus] 41-513
- Moukwa, M.**  
Microclimate of concrete barrier walls: temperature, moisture and salt content [1986, p.615-623, eng] 41-1997
- Mozzherina, V.I.**  
Slow hydrothermal movements of soil and ground masses on slopes (creep) [1986, p.77-90, rus] 41-1198
- Mehana, G.**  
Results of laboratory tests on AMIR compacted asphalt slabs [1987, p.417-451, eng] 41-4031
- Mikhailala, Zh.I.**  
Mathematical modeling of thermal regime of a building in annual cycle, for fuel economy in heating-cooling of premises [1986, p.86-89, rus] 41-905
- Modie, P.J.**  
Palynology as a method for dating iceberg scours [1986, p.233-239, eng] 41-3115
- Mudrov, I.U.V.**  
Peculiarities and regularities governing the behavior of frost-susceptible soils in different landscapes affected by industrial activities [1985, p.103-105, rus] 41-326
- Maench, R.D.**  
1984-1985 current observations in the East Greenland Current: a preliminary description [1986, p.41-53, eng] 41-3058  
Comments on *A heat balance for the Bering Sea ice edge* [1986, p.2205-2208, eng] 41-2843  
Current regimes across the East Greenland Polar Front at 78 deg 40' north latitude during summer 1984 [1987, p.6741-6753, eng] 41-4234
- Muggeridge, D.B.**  
Review of interaction of icebergs with offshore structures [1985, p.693-704, eng] 41-668  
Short term motion analysis of icebergs in linear waves [1987, p.247-258, eng] 41-3036
- Muhammad, C.C.**  
Snow melter [1983, 8 col., eng] 41-479
- Muhr, A.H.**  
Effect of polysaccharide stabilizers on the rate of growth of ice [1986, p.683-710, eng] 41-2491
- Mukhametov, R.M.**  
Glacier dynamics of the Altai-Sayan Mountain System for the last 150 years [1986, p.95-99, 214-216, eng] 41-1060
- Mukherjee, P.**  
Evaluation and prediction of concrete durability—Ontario Hydro's experience [1987, p.1121-1154, eng] 41-3721
- Mukhetdinov, N.A.**  
Experimental investigations of heat-mass transfer coefficients in macroporous media [1986, p.119-127, rus] 41-3455

- Mukhomtziyanov, G.I.**  
Performance of sub-drainage systems in peat soils of the Barab lowland [1984, p.51-52, rus] 41-4089
- Mulherin, N.**  
Hudson River ice management [1985, p.96-110, eng] 41-1488
- Mulherin, N.D.**  
Atmospheric icing on communication masts in New England [1986, 46p., eng] 41-3142
- Muller, F.**  
Glaciological and climatological investigations of the North Water polynya in northern Baffin Bay [1976, 128p., eng] 41-606
- Müller, H.-N.**  
Glacial and periglacial investigations in Skidadalum, Tröllaslagi, Northern Iceland [1986, p.1-18, eng] 41-1788
- Müller, K.**  
Ship operation onboard the German polar research and supply vessel *Polarstern* [1986, p.1523-1526, ger] 41-2195
- Müller-Wille, L.**  
Snow and ice in Inuit place names in the eastern Canadian Arctic [1985, p.55-57, eng] 41-1484
- Mulvihill, E.A.**  
Numerical simulation of the effects of varying ice crystal nucleation rates and aggregation processes on orographic snowfall [1986, p.1658-1680, eng] 41-2500
- Munakata, T.**  
Buoyancy and surface tension driven natural convection with solidification [1986, p.1733-1738, eng] 41-3292
- Munaswamy, K.**  
Analysis of gravity platform foundations using F.E.M. with stochastic materials [1986, p.127-135, eng] 41-358
- Munday, J.P.**  
Endicott slope protection design and construction [1987, p.47-54, eng] 41-2401
- Muneta, P.**  
Effects of freezing on nitrite stability in aqueous solutions [1987, p.22-23, eng] 41-2808
- Mungall, C.**  
Beaufort Sea atlas [1986, p.10-11, eng] 41-2199
- Muniz, R.**  
Reference guide for building diagnostics equipment and techniques [1986, 148p., eng] 41-3359
- Munster, J.A.**  
Ground-water contamination at Peters Creek, Municipality of Anchorage, Alaska: ground-water occurrence and movement [1986, 12p., eng] 41-1351
- Murai, S.**  
Factor analyses of damage modes of asphalt pavements [1987, p.511-523, eng] 41-4034
- Murakami, K.**  
Trial construction of 20-m span ice dome [1986, p.67-73, jpn] 41-439
- Murakami, M.**  
Experiments on aerosol scavenging by natural snow crystals. Pt.3. The effect of snow crystal charge on collection efficiency [1985, p.1127-1137, eng] 41-2569
- Muramatsu, K.**  
Net craning-up method for snow removal [1986, p.83-85, jpn] 41-441
- Murase, H.**  
Storage of vegetables by the use of snow [1986, p.149-157, jpn] 41-1219
- Murase, H.**  
Attempts at prevention of snow, frost and ice damage in railways by means of a novel ice repellent coating system using new polymeric materials [1987, p.9-17, jpn] 41-3754
- Murase, N.**  
Unfrozen compartmentalized water in gels and its anomalous crystallization during warming [1986, p.5420-5426, eng] 41-2107
- Murashko, N.V.**  
Distributing device 110 kv with mobile reel-carriage switches [1986, p.9-10, rus] 41-912
- Murat, J.R.**  
Sea ice testing in flexure—the importance of shear deformations [1986, p.209-224, eng] 41-1593
- Murphy, B.**  
Bulk transfer coefficients for heat and momentum over leads and polynyas [1986, p.1875-1883, eng] 41-2220
- Murphy, D.L.**  
Evaluation of the international ice patrol drift model [1986, p.387-409, eng] 41-156
- Murphy, D.R.**  
Reports of the U.S. - U.S.S.R. Weddell Polynya Expedition, October-November 1981 Vol.8: collected reprints [1986, 158p., eng] 41-460
- Murphy, J.P.**  
Swinging door particle separator and deicing system [1981, 4 col. + 3 sheets, eng] 41-2370
- Murray, J.J.**  
Short term motion analysis of icebergs in linear waves [1987, p.247-258, eng] 41-3036
- Murray, M.A.**  
Rational approach to the development of probabilistic design criteria for Arctic shipping [1987, p.401-406, eng] 41-2449
- Murthy, N.S.**  
Decision model for the design of building envelopes [1986, p.1379-1392, eng] 41-1393
- Murthy, T.K.S.**  
SS ACV icebreaking LNG/oil tanker for year round Arctic transportation [1986, p.563-576, eng] 41-1619
- Murzueva, M.K.**  
Effectiveness of the gradual and selective cuttings in the Bilimbav spruce forests [1986, p.89-97, rus] 41-2877
- Musatova, M.M.**  
Work-time resources [1986, p.50-51, rus] 41-1890
- Musial, A.**  
Traces of glaciations in the northwest part of Nordenskiöld Land (West Spitsbergen) [1985, p.497-513, eng] 41-74
- Musil, G.J.**  
Imaging subglacial topography by a synthetic aperture radar technique [1987, p.170-175, eng] 41-4453
- Musoev, Z.**  
Calculating runoff from the Tadzhikistan glaciers [1986, p.131-135, rus] 41-1654
- Musorin, A.V.**  
Regularities governing altitudinal belts of maximum river discharge in Tadzhikistan [1986, p.166-170, rus] 41-128
- Musorin, A.V.**  
Calculating tangential frost-heaving forces of ground [1985, p.93-95, rus] 41-321
- Musorin, A.V.**  
Studying tangential forces of frost heave under laboratory conditions [1985, p.111, rus] 41-331
- Muszyński, I.**  
Coupled marine ice-stream-ice-shelf model [1987, p.3-15, eng] 41-3590
- Muzakeev, M.A.**  
Hydrologic regime of rivers in inner and central Tien Shan [1984, p.3-9, rus] 41-722
- Muzylev, E.L.**  
Water balance of the Changet and Zhazy (Yassy) river basins [1984, p.9-25, rus] 41-723
- Muzylev, E.L.**  
Modeling meltwater runoff in mountain catchment areas from satellite data [1986, p.16-29, rus] 41-2733
- Myers, P.E.**  
Calculation of global ice force from wall-mounted pressure sensors [1985, p.685-692, eng] 41-667
- Myrhaug, D.**  
Comparison of a simple planetary boundary layer model with measurements of a turbulent boundary layer under pack ice [1987, p.135-148, eng] 41-3135
- Myznikov, I.U.N.**  
Hydraulic power construction in the North [1987, 304p., rus] 41-3013
- Nadeau, J.P.**  
Inadequate norms concerning the increase of winter earth-work costs [1987, p.41-44, rus] 41-2799
- Nadeau, J.P.**  
Yield and failure envelope for ice under multiaxial compressive stresses [1986, p.75-82, eng] 41-1306
- Nadeau, J.P.**  
Yield envelope for confined ice [1986, p.25-36, eng] 41-1580
- Nadtochi, G.L.**  
Geography of marine navigation [1985, 263p., rus] 41-1353
- Nagamoto, C.**  
Analysis of silver in individual ice particles after cloud seeding [1982, p.378-380, eng] 41-39
- Nagamoto, C.T.**  
Case study of hydrometeors in Florida cumuli [1982, p.366-369, eng] 41-36
- Nagamoto, C.T.**  
Nature of ice-forming nuclei in marine air masses [1987, p.291-309, eng] 41-4364
- Nagao, I.**  
Cooling of water and the overlying air by melting ice at Lagoon San Rafael in the northern Patagonia [1987, p.97-102, eng] 41-3833
- Nagel, R.H.**  
Design and construction of the Mars ice island [1987, p.25-32, eng] 41-2398
- Naghibi, H.**  
Heat of solution of methane in water from 0 to 50 C [1986, p.4621-4623, eng] 41-2064
- Naghibi, H.**  
Heats of solution of ethane and propane in water from 0 to 50 C [1987, p.245-248, eng] 41-3311
- Nagurnyi, A.P.**  
Modelling of continental and sea ice as part of climate models [1986, 104p., rus] 41-4092
- Nagurnyi, A.P.**  
Results of modeling high latitude climates [1986, p.21-32, eng] 41-3263
- Nagurnyi, A.P.**  
Studies of the role of processes of ocean-atmosphere interaction in climatic changes of the Northern Hemisphere [1986, 163p., eng] 41-3262
- Naidu, A.S.**  
Effect of Prudhoe Bay crude oil on a tidal-flat ecosystem in Port Valdez, Alaska [1978, p.97-104, eng] 41-2121
- Nakagawa, S.**  
Experimental studies on reducing methods of uplift force to a steel pipe [1986, p.109-120, jpn] 41-3884
- Nakagawa, S.**  
Numerical analysis of frost heaving based upon the coupled heat and water flow model [1986, p.83-97, jpn] 41-3882
- Nakajima, C.**  
Cooling of water and the overlying air by melting ice at Lagoon San Rafael in the northern Patagonia [1987, p.97-102, eng] 41-3833
- Nakajima, C.**  
Influence of meteorological conditions on mass balance of glaciers of the Northern Patagonian ice field [1986, p.63-67, 188-191, eng] 41-1057
- Nakajima, C.**  
Outline of the Glaciological Research Project in Patagonia, 1985-1986 [1987, p.1-6, eng] 41-3821
- Nakajima, C.**  
Water depth of Lagoon San Rafael, Patagonia [1987, p.103-105, eng] 41-3834
- Nakajima, K.**  
Apparatus for deicing of trolley wires [1980, 12 col. + 5 sheets, eng] 41-2372
- Nakamata, S.**  
Outline of the studies on the system of snow-melt of the Joetsu-Shinkansen [1985, p.1-6, jpn] 41-4584
- Nakamura, H.**  
Comparison of experimental and computer modeling of snow-block impact on structures [1986, p.321-324, eng] 41-4283
- Nakanishi, K.**  
Analysis of ice crystallization in continuous crystallizers based on a particle size-dependent growth rate model [1986, p.2241-2246, eng] 41-1348
- Nakanishi, M.**  
Development of high strength welding materials for low temperature service [1986, p.97-105, eng] 41-2312
- Nakano, M.**  
Simultaneous change of water content, solute and temperature profiles in a partially frozen unsaturated soil [1986, p.11-17, jpn] 41-3750
- Nakano, Y.**  
Transport of water in frozen soil 6. Effects of temperature [1987, p.44-50, eng] 41-3019
- Nakawo, M.**  
Characteristics of discharge from a glacier, observed in West Kunlun Mountains, China [1987, p.111-114, eng] 41-3922
- Nakawo, M.**  
Process for distribution of supraglacial debris on the Khumbu Glacier, Nepal Himalaya [1986, p.129-131, eng] 41-754
- Nakawo, M.**  
Textures and fabrics of 700-m deep ice core obtained at Mizuho Station, East Antarctica [1986, p.74-77, eng] 41-3660
- Nakawo, M.**  
Volume expansion of a 413.5-m Mizuho core after its recovery [1986, p.78-85, eng] 41-3661
- Nakhbatseva, S.F.**  
Changes in vegetational cover induced by human factors [1985, p.3-14, rus] 41-254
- Nanishi, K.**  
Attempts at prevention of snow, frost and ice damage in railways by means of a novel ice repellent coating system using new polymeric materials [1987, p.9-17, jpn] 41-3754
- Nanthikesan, S.**  
Tensile fracture model for ice [1987, p.225-233, eng] 41-2425
- Nardeau, J.P.**  
Intrinsic curve of ice under compression [1987, p.(C1)322-(C1)327, fre] 41-4328
- Narita, H.**  
Textures and fabrics of 700-m deep ice core obtained at Mizuho Station, East Antarctica [1986, p.74-77, eng] 41-3660
- Narusbaev, A.A.**  
Man, sea, technology [1987, 335p., rus] 41-4145
- Naruse, R.**  
Ablation of ice and heat balance on Soler Glacier, Patagonia [1987, p.37-42, eng] 41-3826
- Naruse, R.**  
Borehole closure at Mizuho Station, Antarctica [1986, p.66-73, eng] 41-3659
- Naruse, R.**  
Characteristics of ice flow of Soler Glacier, Patagonia [1987, p.79-85, eng] 41-3830
- Naruse, R.**  
Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield [1987, p.133-140, eng] 41-3830
- Naruse, R.**  
Ice avalanches on Soler Glacier, Patagonia [1987, p.87-90, eng] 41-3831
- Naruse, R.**  
Mapping structure and morphology of Soler Glacier, Chile, using vertical aerial photographs [1986, p.8-10, eng] 41-729
- Naruse, R.**  
Structural and morphological characteristics of Soler Glacier, Patagonia [1987, p.69-77, eng] 41-3829
- Nasello, O.B.**  
Crystal structure of ice accreted on an ice substrate [1987, p.120-122, eng] 41-3604
- Nasyrov, G.**  
Bathometer for water sampling in freezing weather [1983, p.60-61, rus] 41-1828
- Natarov, V.M.**  
Influence of pine, spruce and black alder forests on the formation of snow cover [1987, p.15-18, rus] 41-4171
- Nath, J.H.**  
Natural hazards and research needs in coastal and ocean engineering [1984, 62p., eng] 41-83
- National Conference on Hydraulic Engineering,**  
Williamsburg, VA, Aug. 3-7, 1987  
Hydraulic engineering [1987, 1162p., eng] 41-4220

- National Research Council, Canada. Division of Mechanical Engineering**  
Research and development in the Division of Mechanical Engineering, 1985 [1986, 89p., eng] 41-2575
- National Research Council. Marine Board. Committee on Arctic Integrated Ocean Information Systems**  
NOAA Information Services for U.S. Arctic Marine Operations: an assessment of needs and technology [1986, 77p., eng] 41-3508
- National Research Council. Marine Board. Committee on Arctic Sea Floor Engineering**  
Understanding the Arctic sea floor for engineering [1982, 141p., eng] 41-893
- National Research Council. Polar Research Board**  
Recommendations for a U.S. ice coring program [1986, 67p., eng] 41-1352
- NATO Advanced Research Workshop on Grazing Research at Northern Latitudes, Hvanneyri, Iceland, Aug. 5-10, 1985**  
Grazing research at northern latitudes [1986, 374p., eng] 41-216
- NATO Advanced Research Workshop on Ices in the Solar System, Nice, France, Jan. 16-19, 1984**  
Ices in the solar system; proceedings of the workshop, 1984 [1985, 954p., eng] 41-1693
- NATO Advanced Study Institute on Air-Sea-Ice Interaction, Acquafredda di Maratea, Italy, Sep. 28-Oct. 10, 1981**  
Geophysics of sea ice [1986, 1196p., eng] 41-2985
- NATO Advisory Group for Aerospace Research and Development**  
Rotorcraft icing—progress and potential [1986, 128p., eng] 41-4583
- Natsilevskii, I.U.D.**  
Increasing the thermoinsulative properties of lightweight concrete panels [1986, 88p., rus] 41-2647
- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas)**  
Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas) [1986, 126p., rus] 41-2213
- Naumenko, I.U.V.**  
Benthos in the experimental bays of the Ob' River below Novosibirsk [1985, p.66-72, rus] 41-1832
- Naumova, L.A.**  
Experience and prospects of using self-contained steam-liquid cooling devices in construction on permafrost [1983, p.3-12, rus] 41-4471
- Nawy, E.**  
Freeze-thaw resistance of polymer modified concrete [1987, p.863-876, eng] 41-3710
- Nazarenko, D.**  
Acoustic noise measurements of icebergs [1985, p.460-463, eng] 41-228
- Nazarenko, D.M.**  
Sea ice drift measurements using satellite-tracking beacons [1986, p.583-597, eng] 41-168
- Nazarov, V.I.**  
Calculational method for determination of carburetor icing rate [1985, p.544-546, eng] 41-2944
- Nazarova, I.M.**  
Heliogeophysics and the control of natural environments [1986, 192p., rus] 41-652
- Nazintsev, I.U.L.**  
Brine in sea ice and its effect on sea ice heat conductivity [1986, p.107-115, rus] 41-1266
- Young sea ice as a platform for cargo unloading in Antarctica**  
[1986, p.120-126, rus] 41-1268
- Nazirov, M.**  
Effect of divergence on ice redistribution in the Arctic Ocean, revealed by space imagery analysis [1987, p.30-36, rus] 41-4618
- Methods of compiling general radar maps of polar regions**  
[1986, p.58-63, rus] 41-2717
- Nechaeva, E.G.**  
Regional landscape-geochemical investigations [1986, 159p., rus] 41-4113
- Nedoshvin, O.A.**  
Ice destruction. Methods and technology [1986, 214p., eng] 41-2564
- Needham, R.**  
Proceedings [1987, 653p., eng] 41-3232
- Needham, W.**  
Municipal decision making and the role of salt in snow and ice control in Ontario [1979, 68p., eng] 41-236
- Neff, P.W.**  
Air flow windows—an evaluation of their potential for use in Arctic and sub-Arctic environments [1986, 54p., eng] 41-250
- Neffel, A.**  
Long-term record of H<sub>2</sub>O<sub>2</sub> in polar ice cores [1986, p.262-270, eng] 41-1756
- Nekhludov, V.S.**  
Manual for construction foremen working in the northern construction-climatic zone [1986, 328p., rus] 41-3664
- Nekrasov, I.A.**  
Application of space imagery to geocryologic mapping [1985, p.187-195, eng] 41-1445
- Cryolithozone and ground water** [1987, p.116-118, rus] 41-3398
- Thermal ero. Baykal Amur railroad zone** [1984, p.35-39, rus] 41-4356
- Nelander, A.**  
High resolution, phase doppler radar for detection of small icebergs in Arctic sea routes [1986, p.358-363, eng] 41-1106
- Nelson, B.E.**  
Dynamic testing of a cryogenic heat pipe/radiator [1978, p.105-110, eng] 41-469
- Nelson, D.L.**  
Snow depth and incidence of a snowmold disease on mountain big sagebrush [1986, p.215-221, eng] 41-3571
- Nelson, D.M.**  
Spring distributions of density, nutrients, and phytoplankton biomass in the ice edge zone of the Weddell-Scotia Sea [1987, p.7181-7190, eng] 41-4270
- Nelson, F.**  
Growth mechanisms in aggradation palsas [1984, p.65-78, eng] 41-626
- Nelson, F.E.**  
Device for monitoring soil movement in peatlands [1986, p.275-281, eng] 41-1258
- Permafrost distribution in central Canada: applications of a climate-based predictive model** [1986, p.550-569, eng] 41-4137
- Nelson, J.G.**  
Proceedings [1987, 653p., eng] 41-3232
- Nelson, S.P.**  
Influence of storm flow structure on hail growth [1982, p.431-433, eng] 41-50
- Sensitivity of halstone growth to variations in microphysical parameters** [1982, p.438-441, eng] 41-52
- Wet growth of halstones: integration of multiple doppler data and halstone structure analysis in a kinematic model** [1984, p.267-269, eng] 41-4397
- Nemerinkskii, Zh.N.**  
Genetic formula for calculating maximum discharge of rain floods in the Lena River basin [1986, p.3-8, rus] 41-2648
- Nenninger, R.D.**  
Monitoring a sump containing drilling mud with a high salt content [1987, 47p., eng] 41-3076
- Nepomislava, N.I.**  
Woody plants of mountain valleys in Polar Ural Mountains [1986, p.72-80, rus] 41-2250
- Neralia, V.R.**  
Winter Ice Experiment Beaufort Sea (WIEBS)—data collection [1987, p.203-212, eng] 41-4274
- Nesmelova, E.I.**  
Heat balance of the non-thermozone zone of the European RSFSR [1987, p.54-60, rus] 41-4168
- Nessim, M.A.**  
Rational approach to the development of probabilistic design criteria for Arctic shipping [1987, p.401-406, eng] 41-2449
- Nesterenko, I.M.**  
Soil-melioration studies in Karelia [1986, 144p., rus] 41-4115
- Nesterov, I.I.**  
Studying heat and mass transfer in frozen ground around thermopiles [1986, p.1127-1130, rus] 41-2537
- Nesterov, V.I.**  
Introduction of ductless pipe-laying method with solid phenol-poroplast thermal insulation [1986, p.18-20, rus] 41-2796
- Nesterov, V.V.**  
Efficiency of producing and using lightweight concretes for construction in the Murmansk region [1986, p.62-67, rus] 41-4557
- Integrated groups of concrete-placing equipment in polar regions** [1987, p.5-7, rus] 41-3065
- Reducing the amount of construction materials needed under conditions of Siberia and the Far East** [1986, 136p., rus] 41-3157
- Nestship vessels feel at home in ice conditions**  
*Nestship vessels feel at home in ice conditions* [1985, p.120-121, rus] 41-1524
- Neubauer, F.**  
Progress in snow and avalanche measuring techniques by using microprocessors [1984, p.175-179, ger] 41-712
- Neukirchner, R.J.**  
Analysis of laterally loaded piles in permafrost [1987, p.15-29, eng] 41-2116
- Behavior of laterally loaded piles in permafrost** [1987, p.1-14, eng] 41-2115
- Nevecheria, V.L.**  
Changes in engineering-geocryological conditions of western Pur-Nadym interfluve induced by economic development [1986, p.184-191, rus] 41-2839
- Nevskii, L.M.**  
Moisture deficiency in some trees during fall-winter seasons [1986, p.97-100, rus] 41-2900
- Nevzorov, A.N.**  
On the microstructure and ice water content of high clouds [1984, p.73-76, eng] 41-4375
- New barge-tugboat system**  
New barge-tugboat system [1985, p.80-81, rus] 41-1520
- New icebreaking bow makes debut**  
New icebreaking bow makes debut [1986, p.17-18, eng] 41-2977
- New offshore ship types for the frontier areas**  
New offshore ship types for the frontier areas [1986, p.22-24, eng] 41-88
- New type of cooperation**  
New type of cooperation [1985, p.33, rus] 41-1516
- New Zealand. Department of Scientific and Industrial Research. Antarctic Division**  
New Zealand antarctic research programme: report on reductions, extensions and other modifications to the 1985/86 programme [1986, 4 leaves, eng] 41-383
- Planned New Zealand antarctic activities for 1986-1987**  
[1986, 26p., eng] 41-382
- Newark, M.J.**  
New look at ground snow loads in Canada [1984, p.37-48, eng] 41-1945
- Newbury, G.S.**  
R-class icebreaker model experiment results [1986, p.333-348, eng] 41-1603
- Newell, R.**  
Strength and durability of concretes made with type 10 cements used in Ontario [1987, p.973-996, eng] 41-3716
- Newman, K.**  
Labcrete, realcrete, and hypocrete where we can expect the next major durability problems [1987, p.1259-1283, eng] 41-3726
- Newman, S.B.**  
Preliminary investigation of snowflake aggregation near the melting layer in stratiform clouds [1982, p.381-383, eng] 41-40
- News on the improvement of steels designed for arctic conditions**  
News on the improvement of steels designed for arctic conditions [1985, p.9, rus] 41-1513
- Newsam, D.M.T.**  
Freezing temperatures of water, alkanolic acids and their mixtures [1986, p.79-86, eng] 41-2017
- Newton, J.L.**  
Circulation and water masses of the East Greenland shelf [1987, p.6729-6740, eng] 41-4233
- Newton, J.M.**  
Ice/frost detection using millimeter wave radiometry. Final report for period 28 May 1980-31 August 1981 [1981, 55p., eng] 41-4155
- Nguyen, D.D.**  
Mechanical properties of atmospheric ice [1986, p.67-74, eng] 41-1305
- Nguyen-Lamba, M.**  
Numerical two-dimensional study of thermal behaviour around a cylindrical cooled underground cavity. Domain of validity of an axisymmetrical scheme [1986, p.105-114, eng] 41-1281
- Nguyen, N.B.**  
Cyclic swelling of clay [1986, p.105-114, rus] 41-3399
- Nichols, A.D.**  
SAR for real-time ice reconnaissance [1986, p.383-389, eng] 41-835
- Nichols, P.D.**  
Lipids of the antarctic sea ice diatom *Nitzschia cylindrus* [1986, p.1649-1653, eng] 41-614
- Nickling, W.G.**  
Surface wind characteristics along the Icefield Ranges, Yukon Territory, Canada [1985, p.123-134, eng] 41-1224
- Nikus, U.**  
Snow chemistry of a glacier in the central eastern Alps (Hintereisferner, Tyrol, Austria) [1986, p.1-18, eng] 41-3522
- Nicol, M.**  
Partial phase diagram for the system NH<sub>3</sub>-H<sub>2</sub>O: the water-rich region [1985, p.39-47, eng] 41-1695
- Nicolet, D.**  
French insurance industry facing avalanche risks [1985, p.47-52, fre] 41-863
- Niedoroda, A.**  
Preliminary simulation of the formation and infilling of sea ice gouges [1986, p.259-268, eng] 41-3118
- Niemenlehto, J.J.**  
In-ice field measurements for an ice load estimation [1986, p.762-778, eng] 41-1131
- Nienow, J.A.**  
Cryptoendolithic microbial environment in the Ross desert of Antarctica: satellite-transmitted continuous nanoclimate data, 1984 to 1986 [1987, p.273-287, eng] 41-4627
- Nilazov, R.A.**  
Engineering-geological observation polygons for studies and control of human factors impact on the development of exogenic processes [1986, p.70-79, rus] 41-602
- Nikiforova, K.V.**  
Quaternary research (Selected papers of the 11th INQUA Congress) [1986, 200p., rus] 41-549
- Nikitin, E.D.**  
Thermodynamic properties of metastable systems and the kinetics of phase transformations [1985, 87p., rus] 41-552
- Nikitin, N.P.**  
Prospects of using autoregression methods in measuring ice thickness by continuous radiation systems [1986, p.126-130, rus] 41-705

- Nikitin, P.A.**  
Characteristics of radar echoes from sea ice [1986, p.85-92, rus] 41-2719  
Methods of compiling general radar maps of polar regions [1986, p.58-63, rus] 41-2717
- Nikitin, S.A.**  
Results of sounding Altai glaciers with a portable radar [1986, p.116-121, rus] 41-1650
- Nikitin, S.P.**  
Variability of hydrological characteristics in western Siberia [1986, 204p., rus] 41-1969
- Nikitin, V.A.**  
Basic aspects of the requirements for the brittle fracture strength of ships and marine structures under northern conditions [1986, p.1-22, eng] 41-1579  
Temperature fields in the hulls of Arctic ships [1985, p.9-10, rus] 41-3350
- Nikitin, V.F.**  
Using short pyramidal piles with intermediate sand-cushions in weak ground [1985, p.20-21, rus] 41-283
- Nikleva, S.**  
Composition of snow in Pacific coastal mountains [1986, p.1161-1164, eng] 41-794
- Nikolaev, I.U.V.**  
Studies of ice-edge zones of Arctic seas [1986, p.131-138, eng] 41-3264  
Studies of the role of processes of ocean-atmosphere interaction in climatic changes of the Northern Hemisphere [1986, 163p., eng] 41-3262
- Nikolaev, S.D.**  
Isotope composition of oxygen in the ocean-glacier system in Late Pleistocene [1985, p.172-174, rus] 41-3538
- Nikolaev, V.**  
Design margins for icebreakers [1987, p.42-45, rus] 41-3793
- Nikolaev, V.A.**  
Drainage of the Ob' River basin and its utilization [1986, 135p., rus] 41-4572  
Ground waters in southern West Siberia (Formation and problems of rational utilization) [1987, 166p., rus] 41-3649
- Nikolaev, V.I.**  
Isotope composition of oxygen in the ocean-glacier system in Late Pleistocene [1985, p.172-174, rus] 41-3538
- Nikonenko, I.S.**  
Dynamics of freezing and thawing of ground around a cooled gas pipeline [1986, p.14-16, rus] 41-3206
- Nim, I.U.A.**  
Possibility of using the transient processes sounding method in geocryological mapping [1986, p.144-153, rus] 41-3495
- Nimis, P.L.**  
Structure and floristic composition of a high Arctic tundra: Ny Ålesund (Svalbard Archipelago) [1985, p.47-58, eng] 41-372
- Ninias, R.M.**  
Automated extraction of pack ice motion from advanced very high resolution radiometer imagery [1986, p.10, 725-10, 734, eng] 41-1012
- Nishizumi, K.**  
In situ H-3, C-14, and Be-10 for determining the net accumulation and ablation rates for ice sheets [1987, p.4947-4952, eng] 41-3343
- Nishikawa, M.**  
Concentrations of trace elements in surface snow in the area near Syowa Station, Antarctica [1986, p.47-55, eng] 41-3657
- Nishimura, H.**  
Melting of horizontal ice layer from above by combined effect of temperature and concentration of aqua-solvent [1987, p.227-232, eng] 41-3963
- Nishizaki, R.S.**  
Model test of an ice class bulk carrier with the Thyssen/Waas bow form [1986, p.168-172, eng] 41-978
- Nistratova, T.A.**  
Regional engineering geological evaluation according to fitness for above-ground mass construction [1986, p.200-206, rus] 41-2101
- Nittrouer, C.A.**  
Biogenic-silica accumulation in the Ross Sea and the importance of antarctic continental-shelf deposits in the marine silica budget [1986, p.2099-2110, eng] 41-458
- Nixon, J.F.**  
Behavior of laterally loaded piles in permafrost [1987, p.1-14, eng] 41-2115  
Design of Norman Wells pipeline for frost heave and thaw settlement [1986, p.67-85, eng] 41-2516  
Observations of soil freezing and frost heave at Inuvik, Northwest Territories, Canada: Discussion [1986, p.436-438, eng] 41-1929  
Pipeline frost heave predictions using a 2-D thermal model [1986, p.67-82, eng] 41-644  
Pipeline frost heave predictions using the Segregation Potential frost heave method [1987, p.109-114, eng] 41-4631  
Thermal simulation of subsea saline permafrost [1986, p.2039-2046, eng] 41-4077  
Thermally induced heave beneath chilled pipelines in frozen ground [1987, p.260-266, eng] 41-4055
- Nixon, W.A.**  
Applications and limitations of finite element modeling to glaciers: a case study [1985, p.11, 303-11, 311, eng] 41-495  
Effects of rate, temperature, and microstructure on the fracture toughness of ice [1986, 6p., eng] 41-2135  
Fracture toughness of freshwater ice as a function of loading rate [1986, p.287-296, eng] 41-1599  
Fracture toughness of ice over a range of grain sizes [1985, 10p. + figs., eng] 41-1680  
On the splitting of icebergs—natural and induced [1987, p.379-385, eng] 41-2446
- Noble, M.**  
Acoustic noise measurements of icebergs [1985, p.460-463, eng] 41-228
- Nobuta, Y.**  
Durability of lightweight concrete for arctic concrete structures [1985, p.431-438, eng] 41-889
- Nogami, K.**  
In-place surface recycling on expressways [1987, p.893-915, eng] 41-4047
- Nogovitsyn, D.D.**  
Water resources of the Yakut ASSR and their use [1985, 124p., rus] 41-3432
- Nohguchi, Y.**  
Equation for avalanche motion restricted by a diversion barrier [1987, p.153-162, jpn] 41-4006  
Model of snow glide acceleration to full depth avalanche release [1986, p.169-180, jpn] 41-3008  
Traveling path of snow avalanche on real configuration (I) [1986, p.147-168, jpn] 41-3007  
Traveling path of snow avalanche on real configuration II [1987, p.133-152, jpn] 41-4005
- Nojiri, Y.**  
Durability of lightweight concrete for arctic concrete structures [1985, p.431-438, eng] 41-889
- Noland, J.R.**  
Heat pump control/defrost circuit [1983, 10 col., eng] 41-1983
- Noonan, D.K.J.**  
Use of insulation to provide frost protection for the Waterloo Dam in northern Saskatchewan [1982, p.437-449, eng] 41-3751
- Nordeng, T.E.**  
Various condensation schemes and their impact on the simulation of polar lows [1986, p.221-233, eng] 41-1807
- Nordic Symposium on Climatic Changes and Related Problems, 2nd, Stockholm, Sweden, May 16-20, 1983**  
Climatic changes on a yearly to millennial basis [1984, 667p., eng] 41-2005
- Nordlund, O.P.**  
Huurre expedition to the North Pole in 1984 [1987, 52p., eng] 41-3368  
Ice features and movement north of Ellesmere Island, Canada [1987, p.32-43, eng] 41-3371  
In-ice field measurements for an ice load estimation [1986, p.762-778, eng] 41-1131  
Low adhesion coatings for sea spray ice on offshore drilling units in northern waters [1986, p.512-527, eng] 41-1116  
Major inorganic ions in the North Pole snow samples [1987, p.8-13, eng] 41-3369
- Nordström, O.**  
Testing antilock systems: Winter tests 1985 for evaluation of draft revision of ECE Reg. 13, Annex 13 [1986, 46p. + appends., swe] 41-572  
Testing of an antilock system. 1986 winter tests with passenger cars, studies of performance and test methods [1986, 37p. + appends., swe] 41-2218
- Noren, T.**  
Method of selective underground mining and stabilization of rock cavities [1983, 18 col., eng] 41-1773
- Norin, B.N.**  
Alpine phytocenotic systems of the Subarctic [1986, 292p., rus] 41-1344
- Norrell, S.A.**  
Effect of Prudhoe Bay crude oil on a tidal-flat ecosystem in Port Valdez, Alaska [1978, p.97-104, eng] 41-2121
- Norris, J.M.**  
Calibration procedure for a daily flow model of small watersheds with snowmelt runoff in the Green River coal region of Colorado [1985, 32p., eng] 41-3305
- Norris, R.M.**  
Swinging door particle separator and deicing system [1981, 4 col. + 3 sheets, eng] 41-2370
- Northern Libraries Colloquy, 11th, Luleå, Sweden, 1986**  
Proceedings [1986, 210p., eng] 41-966  
Northern Workshop, 1st, Edmonton, Alberta, Nov. 22-24, 1984  
Proceedings [1986, 74p., eng] 41-1034
- Northwood, R.**  
Strength and durability of concretes made with type 10 cements used in Ontario [1987, p.973-996, eng] 41-3716
- Norton, D.A.**  
Growth forms and ecology of *Nothofagus solandri* at the alpine timberline, Craigieburn Range, New Zealand [1984, p.361-370, eng] 41-1236
- Norton, L.**  
Proceedings [1987, 653p., eng] 41-3232
- Norwegian Hydrotechnical Laboratory. SINTEF Group**  
Polar technology—ice engineering [1986, c10p., eng] 41-268
- Nosenko, G.A.**  
Using satellite survey data for studying mass transfer in glacial systems [1986, p.26-31, rus] 41-3211
- Noskov, A.A.**  
Organizing construction of the Kureyskaya hydroelectric power plant [1986, p.17-23, rus] 41-2864
- Nosyrev, G.I.A.**  
Ultimate masses of large-size blocks transported by draw-plates and pneumatic rollers [1986, p.13-14, rus] 41-2780
- Nottingham, D.**  
Costs to the public due to use of corrosive deicing chemicals and a comparison to alternate winter road maintenance procedures [1983, 35p., eng] 41-4607
- Novikov, N.F.**  
Engineering and geological problems in building hydraulic structures on perennially frozen rocks [1986, p.62-66, rus] 41-3447
- Novikov, V.M.**  
Nitrogen cryostat for study of Moessbauer scattering [1987, p.981-983, eng] 41-3160
- Novikov, V.N.**  
Geographic studies of coastal zones of Arctic seas [1986, p.5-7, rus] 41-4061
- Novozhilov, G.F.**  
Foolproof sinking of piles into thawed and perennially frozen grounds [1987, 111p., rus] 41-4167
- Nowlin, W.D., Jr.**  
Water masses and currents of the southern ocean at the Greenwich Meridian [1987, p.6462-6476, eng] 41-3641
- Nuclear Icebreaker Rossia**  
Nuclear icebreaker *Rossia* [1985, p.25-27, eng] 41-2939
- Nurkadirov, L.K.**  
Artificial drainage of a burst-threatening lake located at the foot of a surging glacier [1986, p.108-110, 220-221, rus] 41-4352
- Nuttall, A.H.**  
Performance parameters for quasi canonical class A non-Gaussian noise: source distribution law  $\mu = 0$ , propagation law  $\gamma = 2$  [1986, 161p., eng] 41-2072
- Nyberg, R.**  
Freeze-thaw activity at snowpatch sites. A progress report of studies in N. and S. Sweden [1986, p.207-211, eng] 41-1879
- Nivation and local glaciation in N. and S. Sweden.**  
A progress report [1986, p.197-205, eng] 41-1878
- Nyberg, M.**  
Increase in mineral N in soils during winter and loss of mineral N during early spring in north-central Alberta [1986, p.397-409, eng] 41-1085
- Nye, J.F.**  
Isotropic points on glaciers [1986, p.363-365, eng] 41-4289
- Nyman, K.J.**  
Structural monitoring concepts for arctic pipelines [1986, p.47-66, eng] 41-643
- Oakes, J.R.**  
SHAREM cold weather experience [1986, p.149-161, eng] 41-929
- Oaks, S.D.**  
Avalanche hazard zoning in Vail, Colorado: the use of scientific information in the implementation of hazard reduction strategies [1987, p.157-168, eng] 41-4127
- Oayama, K.**  
Experimental study on prevention of differential frost heave by using Geogrid [1985, p.179-186, jpn] 41-4586
- Obidin, A.D.**  
Improving the performance of ripper-equipped bulldozers under conditions of Siberia and the North [1987, p.26-27, rus] 41-4122
- O'Breirne, J.J.**  
Explosion welding of a large diameter gas transmission pipeline [1986, p.1-13, eng] 41-77
- O'Brien, H.W.**  
Meteorological and snow cover measurements at Grayling, Michigan [1985, p.212-229, eng] 41-1497
- O'Brien, S.G.**  
Scattering and attenuation of millimeter wavelength radiation by snow [1986, 138p., eng] 41-2644
- O'Brien, T.**  
Concrete durability: the interface between research and practice [1987, p.255-264, eng] 41-3695
- Obrucheva, T.S.**  
Determining the state of stress in shaft timbering during thawing [1986, p.28-29, rus] 41-3769
- Oceans '85 Conference, San Diego, CA, Nov. 12-14, 1985**  
Ocean engineering and the environment—Oceans '85 Conference, Vol.1 [1985, 2 vols. (1364p.), eng] 41-217
- Ocvirk, R.**  
Winter service on main-street network in Slovenia [1985, p.31-35, ger] 41-387
- Oderusova, T.G.**  
Rate of oil-spill degradation in meadow soils and its effect on plants [1985, p.27-31, rus] 41-256



- Odum, J.K.**  
Description and interpretation of geologic materials from shotholes drilled for the Trans-Alaska Crustal Transect Project, Copper River basin, Alaska, May 1985 [1986, 18p., eng] 41-4106
- Odyshev, A.G.**  
Studying the working process of hydropneumatic hammers of the EO-2621 excavators [1978, p.74-78, rus] 41-1325
- Oechel, W.C.**  
Impacts of increasing CO<sub>2</sub> on natural vegetation, particularly the tundra [1986, p.36-42, eng] 41-2217
- Oellers, T.**  
Influence of freezing on strata behavior [1985, p.1438-1444, eng] 41-858
- Oerlemans, J.**  
Dynamics of the West Antarctic Ice Sheet [1987, 368p., eng] 41-3271  
Heat budget of the Ross drainage basin [1987, p.287-292, eng] 41-3285  
Numerical experiments on large-scale glacial erosion [1984, p.107-126, eng] 41-629  
Studying the sensitivity of mass-balance model including calculations of temperature profile inside the glacier [1986, p.34-38, 164-168, eng] 41-1051
- Oertler, H.**  
Modeling runoff from Vernagtferner glacier, the Oetzal Alps, Austria [1986, p.65-69, 178-182, rus] 41-4342  
Runoff in basins with variable extent of glaciation [1986, p.59-64, 173-178, rus] 41-4341
- Oeschger, H.**  
Biospheric CO<sub>2</sub> emissions during the past 200 years reconstructed by deconvolution of ice core data [1987, p.140-154, eng] 41-3196  
Review of the history of atmospheric CO<sub>2</sub> recorded in ice cores [1986, p.89-108, eng] 41-2221
- Offshore Technology Conference, 10th, Houston, Texas, May 8-10, 1978**  
Proceedings [1978, 4 vols. (2653p.), eng] 41-2120
- Ogai, M.**  
Non-metallic optical fiber cable for use under low temperature [1981, p.12(2-1)-12(2-4), eng] 41-660
- Oganesian, A.G.**  
Errors in measuring ice thickness by airborne radar [1985, p.660-662, eng] 41-1042
- Ogarkov, A.A.**  
Studying shear strength of ash-slag wastes from thermal power plants located in the Northern climatic zone [1987, p.75-78, rus] 41-4624
- Ogilvie, A.E.J.**  
Impact of climate on grass growth and hay yield in Iceland: A.D. 1601 to 1780 [1984, p.343-352, eng] 41-2008
- Ogorodnikov, S.P.**  
Dredge-excavation of ground [1986, 256p., rus] 41-2913
- Ohata, T.**  
Influence of katabatic wind on the ablation of snow and ice masses [1986, p.25-29, 144-147, rus] 41-4335  
Influence of meteorological conditions on mass balance of glaciers of the Northern Patagonian ice field [1986, p.63-67, 188-191, eng] 41-1057
- Ohlshi, S.**  
Evaluation of durability for concrete in terms of watertightness by "permeability coefficient test results" [1987, p.187-206, eng] 41-3694
- Ohishi, F.**  
Attempts at prevention of snow, frost and ice damage in railways by means of a novel ice repellent coating system using new polymeric materials [1987, p.9-17, jpn] 41-3754
- Oh'izumi, M.**  
Determination of stresses in the snow cover on a mountain slope by snow pressure gauge [1986, p.54-57, eng] 41-3846
- Ohkita, S.**  
Study on the improvement of weld properties for ultra-heavy steel plate (HT-50) for offshore structures in frigid regions [1984, p.53-59, eng] 41-1193
- Ohno, M.**  
Surface chlorophyll a distribution in marginal ice zone in Antarctica, 1984/85 [1986, p.24-33, eng] 41-3630
- Ohta, T.**  
Suspended sediment yield in a glaciated watershed of Langtang Valley, Nepal Himalayas [1987, p.19-24, eng] 41-3910  
Winter runoff in the glaciated drainage basin in Langtang Valley, Nepal Himalayas [1987, p.29-33, eng] 41-3912
- Ohtake, T.**  
Chemical tests of antarctic hygroscopic aerosols [1985, p.208-210, eng] 41-3325  
Removal processes of aerosols in ice fog [1982, p.57-60, eng] 41-3
- Ohtani, H.**  
Mechanism of occurrence of snow damages to forestation trees in North-East Japan [1984, p.133-138, eng] 41-708
- Ohyama, Y.**  
Soil nutrient condition related to the distribution of terrestrial algae near Syowa Station, Antarctica [1986, p.198-201, eng] 41-3636
- Oiwake, S.**  
Freezing fracture of curved water pipes (1st report, freezing behavior of 180 deg curved pipes) [1986, p.2151-2155, eng] 41-531
- Ojanen, T.**  
Natural and forced convection in mineral fibre wall insulation [1986, 119p., fin] 41-2522
- Okada, M.**  
Analysis of the freezing around a chilled pipe in darcy flow [1978, p.31-36, eng] 41-467
- Okada, T.**  
Development of composite members for Arctic offshore structures [1986, p.660-677, eng] 41-1123  
Qualities of high-strength lightweight concrete used for construction of Arctic offshore platform [1987, p.7-15, eng] 41-2922
- Okamoto, K.**  
Step frequency radar for the measurement of sea ice thickness [1986, p.56-65, eng] 41-3658
- Okano, S.**  
Development of 690 MPa yield strength steel plates for arctic offshore structures [1986, p.119-126, eng] 41-357  
Development of heavy thick HT80 steel plates for racks of jack-up rigs [1987, p.8-14, eng] 41-3940
- O'Keefe, J.D.**  
Shock vaporization and the accretion of the icy satellites of Jupiter and Saturn [1985, p.631-654, eng] 41-1728
- Okhalin, S.N.**  
Development of landslide processes in the lower Ob' River valley [1986, p.106-116, rus] 41-4574
- Okimura, T.**  
Groundwater models for mountain slopes [1987, p.265-285, eng] 41-3043
- Okisheva, L.N.**  
Studies of seasonal rhythms of nature, related to combined economic development of the northern Ob'-Yenisey region of the North [1986, p.17-19, rus] 41-4062
- Okland, H.**  
Heating by organized convection as a source of polar low amplification [1986, p.161-176, eng] 41-1804
- Okuhira, F.**  
Glaciological research program in east Queen Maud Land, East Antarctica, Part 5, 1985 [1987, 71p., eng] 41-3668
- Okunishi, K.**  
Groundwater models for mountain slopes [1987, p.265-285, eng] 41-3043
- Oleinik, R.V.**  
Kinetics of the appearance of photostimulated ice-forming activity centers in silver iodide aerosols [1986, p.93-97, rus] 41-1453  
Structural anomalies in ice-forming silver iodide aerosols [1986, p.97-99, rus] 41-1454
- Oleinikov, A.D.**  
Mathematical modeling for determining avalanche spread boundaries [1986, p.78-81, rus] 41-1642
- Olesen, O.B.**  
Glaciological investigations in 1984 at Tasersiaq and Qapiarfup sermia, West Greenland [1985, p.104-107, eng] 41-575  
Ice ablation in West Greenland in relation to air temperature and global radiation [1984, p.155-168, eng] 41-632  
Velocity measurements on Dugaard-Jensen Glacier, Scoresbysund, East Greenland [1986, p.146-150, eng] 41-758
- Olmstead, J.**  
LAMPS MK III environmental capabilities [1986, p.185-200, eng] 41-932
- Olofsson, E.**  
Acid surge in a well-buffered stream [1986, p.282-285, eng] 41-2311
- Olovin, B.A.**  
Temperature and moisture regime of the Vilyuy power plant dam [1986, p.151-161, rus] 41-3458
- Olovsson, I.**  
Snow stars—messages from the sky [1985, p.50-59, ger] 41-3078
- Olsen, H.C.**  
Sedimentation in a glacier lake [1987, p.123-138, eng] 41-3556
- Olsen, M.P.J.**  
Mathematical modeling of the freezing process of concrete and aggregates [1984, p.113-122, eng] 41-2002
- Olson, G.G.**  
Design and construction of the Mars ice island [1987, p.25-32, eng] 41-2398
- Olson, M.E.**  
Medial moraines and surface melt on glaciers of the Torngat Mountains, northern Labrador, Canada [1986, p.350-354, eng] 41-4287
- Olsson, E.**  
Offshore anti-icing, field results and approval considerations [1986, p.471-483, eng] 41-1113
- Olsson, I.**  
Climate and glaciation in Kong Karls Land, eastern Svalbard [1984, p.291-302, eng] 41-2007
- Omae, K.**  
Non-metallic optical fiber cable for use under low temperature [1981, p.12(2-1)-12(2-4), eng] 41-660
- OMAE Specialty Symposium on Offshore and Arctic Frontiers, 1st, New Orleans, LA, Feb. 23-27, 1986**  
Proceedings [1986, 492p., eng] 41-354
- Omanney, C.S.L.**  
Evolution of the Illecillewaet Glacier, Glacier National Park, B.C., using historical data, aerial photography and satellite image analysis [1986, p.31-33, eng] 41-733  
Mapping Canada's glaciers [1986, p.132-134, eng] 41-755  
Photo-interpretation, digital mapping and the evolution of glaciers in Glacier National Park, B.C. [1986, p.27-30, eng] 41-732  
Use of LANDSAT digital data in glacier inventory [1986, p.90-92, eng] 41-745
- O'Neill, K.**  
Moving boundary—moving mesh analysis of phase change using finite elements with transfinite mappings [1986, p.591-607, eng] 41-607  
Natural convection in sloping porous layers [1986, p.697-710, eng] 41-608  
Transient two-dimensional phase change with convection, using deforming finite elements [1985, p.229-243, eng] 41-657  
Use of transfinite mappings with finite elements on a moving mesh for two-dimensional phase change [1983, p.85-110, eng] 41-659
- Onikienko, T.S.**  
Changes in geocryological conditions of water-reservoir basins [1986, p.83-88, rus] 41-3450
- Ono, H.**  
Evaluation of durability for concrete in terms of watertightness by "permeability coefficient test results" [1987, p.187-206, eng] 41-3694
- Ono, N.**  
Oceanic heat flux through a young sea-ice sheet [1986, p.37-43, jpn] 41-3878
- Ono, Y.**  
Protalus rampart related to alpine debris flows in the Kurano-suke Cirque northern Japanese Alps [1986, p.213-223, eng] 41-1880
- Onstott, R.G.**  
Evolution of microwave sea ice signatures during early summer and midsummer in the marginal ice zone [1987, p.6825-6835, eng] 41-4240  
MIZEX 84 ice surface measurements from the FS *Polarstern* [1986, p.30-40, eng] 41-3057  
SAR/SCAT intercomparison of microwave signatures of Arctic sea ice [1986, p.1.7.1-1.7.3, eng] 41-96
- Onuchin, A.A.**  
Altitudinal and zonal characteristics of transformation of solid atmospheric precipitation by the mountain forests of Khamar-Daban [1985, p.109-119, rus] 41-3873
- Oparko, A.G.**  
Organization of earthwork for quarrying, melioration, and placing cohesive ground into impervious elements of the river-bed and left-side dams of the Kureyskaya hydroelectric power plant [1986, p.45-49, rus] 41-2868  
Passing construction wastes and spanning the river at the Kureyskaya station site [1986, p.23-27, rus] 41-2865
- Open Symposium on Wave Propagation: Remote Sensing and Communications, Durham, NH, July 28-Aug. 1, 1986**  
Wave propagation and remote sensing. Pre-print volume [1986, 10 chapters, eng] 41-94
- Orantle, K.**  
Facade elements clad with clinker finish [1987, 36p. + append., fin] 41-3844
- Orel, A.A.**  
Studying the cryogenic and temperature regimes of permafrost bases around foundations of power line supports [1985, p.21-32, rus] 41-1543
- Orel, G.F.**  
Natural water bodies as indicators of landscapes [1986, p.75-80, rus] 41-1369
- Organization and activities of the Research Institute for Hazards in Snowy Areas, Niigata University**  
Organization and activities of the Research Institute for Hazards in Snowy Areas, Niigata University [1985, p.223-255, jpn] 41-4589
- Organization and activities of the Research Institute for Hazards in Snowy Areas, Niigata University, Japan, (1986)**  
Organization and activities of the Research Institute for Hazards in Snowy Areas, Niigata University, Japan, (1986) [1985, p.127-160, jpn] 41-4594
- Orheim, O.**  
Evolution of under-water sides of ice shelves and icebergs [1987, p.176-182, eng] 41-4454  
Flow and thickness of Riiser-Larsenisen, Antarctica [1986, p.5-22, eng] 41-4093  
Oxygen isotopes and accumulation rates at Riiser-Larsenisen, Antarctica [1986, p.33-47, eng] 41-4095  
Snow and ice studies by thematic mapper and multispectral scanner Landsat images [1987, p.109-118, eng] 41-4445
- Orlov, M.T.**  
Frost resistance and waterproofness of fresh, steamed, fine-grained concretes without chemical admixtures [1987, p.74-77, rus] 41-4626
- Orlov, V.O.**  
Experience and prospects for using seasonally freezing grounds as foundations [1985, p.3-11, rus] 41-277



- Orlov, V.O. (cont.)**  
Measures taken for safe operation of buildings erected on frost-heaving ground in the Chits region [1985, p.25-26, rus] 41-286  
Rational use of shallow foundations on frost-heaving ground [1985, p.16-17, rus] 41-281  
Studying the possibility of estimating the frost heave of clayey grounds according to their swelling [1985, p.76-78, rus] 41-312
- Orlovskii, S.-D.D.**  
Mixed-grass-edge tundra soils of Wrangel Island [1986, p.98, rus] 41-2460
- Ornaby, J.P.**  
Characterization of snow and ice reflectance zones on glaciers using Landsat thematic mapper data [1987, p.104-108, eng] 41-4444
- O'Rourke, M.**  
Proposed code provisions for drifted snow loads [1986, p.2080-2092, eng] 41-405
- O'Rourke, M.J.**  
Drift snow loads on multilevel roofs [1984, p.14-25, eng] 41-1943
- Orr, W.**  
Induction of freezing tolerance in an embryonic cell suspension culture of *Brassica napus* by abscisic acid at room temperature [1986, p.23-32, eng] 41-2225
- Orth, W.**  
Underpinnings with ground freezing [1985, p.203-211, ger] 41-1562
- Ortolani, E.**  
Electronic monitoring and telematics for traffic protection along state roads [1987, p.16-19, ita] 41-3307
- Orville, H.D.**  
Numerical modeling of hailstorms and hailstone growth. Part 1: Preliminary model verification and sensitivity tests [1986, p.2014-2035, eng] 41-4059  
Seeding potential of stratus and nimbostratus clouds: a PEP numerical experiment [1982, p.222-225, eng] 41-21
- Orzhikhovskaya, R.I.A.**  
Frost heave of ground under variable loading [1985, p.80-82, rus] 41-314
- Orzhikhovskii, I.U.R.**  
Forecasting ground temperature during adfreezing of piles [1987, p.73-75, rus] 41-3269  
Frost heave of ground under variable loading [1985, p.80-82, rus] 41-314  
Laboratory technique of determining frost heave coefficient [1985, p.106-107, rus] 41-328  
Water accumulation and frost heave in seasonally freezing ground [1985, p.82-83, rus] 41-315
- Osborn, G.**  
Holocene glacier fluctuations [1987, p.26-28, eng] 41-4098  
Lateral-moraine stratigraphy and neoglaciation history of Bugabo Glacier, British Columbia [1986, p.171-178, eng] 41-1190
- Osczevski, R.J.**  
Assessment of a small snowmobile for long-distance unsupported travel [1987, p.597-601, eng] 41-3859
- O'Shea, J.**  
Charting of safe deep draught shipping routes in Canadian Arctic waters [1986, p.820-838, eng] 41-2060
- Oshima, M.**  
Ice engineering research activities on the Japanese coast of Okhotsk Sea [1986, p.15-29, eng] 41-1088
- Osipenko, N.M.**  
Ice fracture mechanics and some of its applications [1986, p.197-210, eng] 41-1096
- Osipov, I.U.S.**  
All-Union tutorial seminar on mathematical modeling in science and technology. Summaries [1986, 333p., rus] 41-2381
- Osipov, V.I.**  
Cyclic swelling of clays [1987, p.23-36, rus] 41-3399
- Osipov, V.N.**  
Determination of surface temperature of anti-iced axial compressor inlet guide vane [1985, p.56-60, eng] 41-2943
- Ospova, T.V.**  
Improving the reliability of 204M excavators under northern conditions [1986, p.11-16, rus] 41-4523
- Osis, V.B.**  
Preliminary results of calibrating airborne ice crystal counters [1986, p.99-107, rus] 41-1556
- Oslo. Norak Polarinstitut**  
Yearbook of the Norwegian Polar Research Institute, 1985 [1985, p.12-15, eng] 41-2888
- Osodoev, M.T.**  
Using snow for dust control in northern mines [1986, p.193-196, rus] 41-2177
- Osokin, N.I.**  
Experience in compiling and using complex engineering glaciological maps [1986, p.213-219, rus] 41-137
- Osterholm, H.**  
Studies of lake sediments and deglaciation on Prins Oscars Land, Nordaustlandet, Svalbard [1986, p.329-344, eng] 41-3564
- Osterkamp, T.E.**  
Measurements of the linear thermal expansion coefficients of asphalt pavement at low temperatures [1986, p.299-301, eng] 41-1298
- Review of subsea permafrost conditions along Alaska's coast** [1986, p.16-23, eng] 41-2510
- Temperature variation of the thermal properties of ice** [1987, 10p., + figs., eng] 41-3238
- Ostlid, H.**  
Flexible culverts in snow avalanche protection for roads [1986, p.19-21, eng] 41-2262
- Ostling, M.**  
Water storage in Storglaciären, Kebnekaise, Sweden [1986, p.279-290, eng] 41-3560
- Ostojca-Starzewski, M.**  
Micromechanics approach to sea ice dynamics [1986, p.267-281, eng] 41-151
- Ostrem, G.**  
Comparison of glacier maps—a source of climatological information [1986, p.225-231, eng] 41-1881  
Repeated glacier mapping for hydrological purposes: water power planning [1986, p.135-140, eng] 41-756  
Sedimentation in a glacier lake [1987, p.123-138, eng] 41-3556
- Ostroumov, V.E.**  
Temperature field and annual heat cycles in soils [1986, p.27-31, rus] 41-1744
- Ostrovskaya, O.V.**  
Interrelation between the composition and behavior of sand-clay soils subject to vibration [1986, p.108-111, rus] 41-2542  
Relationship of composition and behavior of sandy-clayey soils upon vibration [1986, p.112-115, eng] 41-3018
- Ota, T.**  
Development of composite members for Arctic offshore structures [1986, p.660-677, eng] 41-1123
- Ou, J.-W.**  
Maximum density effects on forced laminar convection in horizontal water pipes with near freezing wall temperature [1978, p.67-72, eng] 41-464
- Ouellet, M.**  
Isotopic composition and origin of lacustrine brines in the Arctic [1987, p.210-216, eng] 41-4078  
Limnology of Garrow Lake, NWT, Canada [1987, p.531-549, eng] 41-3854
- Outcalt, S.I.**  
Growth mechanisms in aggradation palsas [1984, p.65-78, eng] 41-626
- Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.35**  
Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.35 [1985, 440p., eng] 41-1784
- Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.39**  
Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.39 [1986, 360p., eng] 41-1785
- Overland, J.E.**  
Northward flow in the Bering and Chukchi seas [1987, p.7097-7105, eng] 41-4264  
Prediction of vessel icing [1986, p.1793-1806, eng] 41-2845
- Overton, A.**  
Reflection experiment on a floating ice platform [1987, p.201-208, eng] 41-2948
- Ovsianikov, V.A.**  
Effectiveness of thermal viewing equipment for ice surveying [1985, p.82-83, rus] 41-1406
- Ovsianikov, V.M.**  
Icing on the walls of a buried pipeline bearing a freezing non-Newtonian liquid [1986, p.212-219, eng] 41-1893
- Ovstedal, D.O.**  
Crustose lichens of Bouvetøya [1986, p.35-56, eng] 41-919  
Lichenicolous ascomycetes from Bouvetøya [1986, p.57-60, eng] 41-920
- Owe, M.**  
Measurements of the north polar cap of Mars and the Earth's Northern Hemisphere ice and snow [1986, p.223-235, eng] 41-959
- Owen, T.**  
Atmospheres of icy bodies [1985, p.731-740, eng] 41-1734
- Owens, E.H.**  
Experimental use of dispersants for spill countermeasures on arctic beaches [1984, p.324-337, eng] 41-895
- Oxholm, O.**  
Scheduled Arctic helicopter operations [1986, p.295-320, eng] 41-2033
- Oxton, A.**  
Computer interfacing of meteorological sensors in a severe weather and high RFI environment [1985, p.205-211, eng] 41-1496
- Ozaki, E.**  
Method of automatic calibration of the tank model (fifth report)—automatic or semi-automatic procedures to calibrate the multiplication factor of the precipitation in snowy basins [1987, p.87-113, jpn] 41-4003
- Ozisik, M.N.**  
Effects of radiation on the melting of a semi-transparent, semi-infinite medium [1978, p.373-378, eng] 41-470
- Pasivirta, J.**  
Study of organochlorine pollutants in snow at North Pole [1987, p.24-31, eng] 41-3370
- Padmanabhan, P.V.**  
Outward phase change in a cylindrical annulus with circumferential fins [1986, p.1773-1779, eng] 41-3295
- Paganelli, A.**  
Could the water redding of Lake Tovel (Trentino, Italy) be related to fluctuations of Alpine glaciers [1985, p.83-88, ita] 41-3177
- Pagé, P.**  
Isotopic composition and origin of lacustrine brines in the Arctic [1987, p.210-216, eng] 41-4078
- Pahaut, E.**  
Avalanche balance in France, Oct. 1, 1984-Sep. 30, 1985 [1985, p.3-16, fre] 41-860  
Avalanche data, 1985-1986 season [1986, p.3-16, fre] 41-3356  
Organization of avalanche risk forecasting. Current status and prospects [1985, p.17-32, fre] 41-861
- Palliere, A.M.**  
Carbonation of concrete with low-calcium fly ash and granulated blast furnace slag: influence of air-entraining agents and freezing-and-thawing cycles [1986, p.541-562, eng] 41-1153
- Paine, R.L.**  
Chlorides in the Don River watershed resulting from road deicing salt [1979, 23p., eng] 41-234
- Paine, S.H.**  
Digital elevation model of the Barnes Ice-Cap derived from Landsat MSS data [1985, p.1937-1944, eng] 41-868
- Pakhomov, V.P.**  
Computerized simulation of economic development of a mineral raw material base in the northern Urals [1985, p.39-45, rus] 41-208  
Economic prerequisites for development in the northern Urals [1985, p.3-14, rus] 41-204  
Problems of developing natural resources in the northern Urals [1985, 72p., rus] 41-203
- Pakhomova, L.A.**  
Photo-control tie of the SMP-32 to the MSU-S data and some reflection spectra characteristics of natural objects [1985, p.57-66, rus] 41-1040
- Pakhuchil, V.V.**  
Woody plants of mountain valleys in Polar Ural Mountains [1986, p.72-80, rus] 41-2250
- Pakutin, A.V.**  
Transformation of spring-flood runoff during swamp drainage in the forest zone [1987, p.67-70, rus] 41-3082
- Palais, J.M.**  
Polar ice cores [1987, p.55-60, eng] 41-3937
- Palamarchuk, V.K.**  
Possibility of conducting high-frequency aeromagnetic surveys in Arctic shelf seas [1978, p.129-133, rus] 41-1001
- Palanisamy, M.**  
X-ray diffraction and ice nucleation studies of AgI-AgCl solid solutions [1986, p.1005-1009, eng] 41-2467
- Pallister, A.E.**  
Prospects for development in Canadian frontier regions—implications for research [1986, p.36-63, eng] 41-2265
- Palmer, D.C.**  
Correction of winter precipitation values following a change of gauge exposure [1985, p.230-236, eng] 41-1498
- Palmisano, A.C.**  
Effects of four environmental variables on photosynthesis-irradiance relationships in antarctic sea-ice microalgae [1987, p.299-306, eng] 41-3146  
Influence of sea ice and sea ice biota on downwelling irradiance and spectral composition of light in McMurdo Sound [1984, p.159-165, eng] 41-614  
Lipids of the antarctic sea ice diatom *Nitzschia cylindrus* [1986, p.1649-1653, eng] 41-614  
Photoadaptive strategies in a natural population of *Phaeocystis pouchetii* in McMurdo Sound [1985, p.133-134, eng] 41-2957  
Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microalgal communities [1987, p.165-173, eng] 41-3132  
Spectral downwelling irradiance in an antarctic lake [1987, p.145-151, eng] 41-3426
- Palosuo, E.**  
Official specifications for ice roads and actual bearing capacity [1984, p.18-19, fin] 41-1937  
Snow research started [1983, p.59-60, fin] 41-1933
- Pan, Y.**  
Growth rate of frost formation through sublimation—a porous medium physical model of frost layers [1987, p.584-593, eng] 41-3402
- Panchishin, I.M.**  
Observation of "anomalous" spectra of Raman scattering at the water-ice phase transition [1986, p.836-839, rus] 41-3686
- Pandey, P.C.**  
Thermodynamic theories of precipitation, dissolution, freezing and melting potentials [1986, p.179-185, eng] 41-530

- Panfilov, V.P.**  
Physical properties and regimes of meadow-chernozem cryogenic soils of the Buryat SSR (1986, 137p., rus) 41-1045
- Pang, G.**  
Discussion on crevasse in frozen earth (1986, p.287-290, chi) 41-1432  
Discussion on maximum seasonal frost depth of ground (1986, p.233-254, chi) 41-1425
- Panin, I.U.I.**  
Naval power plants and equipment (1984, 153p., rus) 41-554  
Navigation and ship control. Collection of works (1986, 137p., rus) 41-3383  
Systems and means of oceanic radio-communication (1984, 144p., rus) 41-557  
Technical operation of ship propulsion plants. Collection of works (1986, 120p., rus) 41-3385
- Panin, P.S.**  
Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia) (1984, 193p., rus) 41-4086  
Salt transfer processes in cryogenic soils (1986, p.245-250, rus) 41-1745
- Panishchev, S.B.**  
Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams (1986, p.3-7, rus) 41-4547
- Panishchev, V.V.**  
Selection of parameters for shaft pillars of placer mines (1986, p.7-10, rus) 41-4548
- Panishkin, A.V.**  
Ice adhesion to structural materials and covers and multi-component anti-icing systems (1982, p.96-101, rus) 41-1274
- Pankratova, E.I.**  
Modeling the process of water yield from snow cover (1986, p.37-46, rus) 41-3586
- Panov, L.K.**  
Theoretical basis for planning northern cities (1986, p.146-154, rus) 41-1206
- Panova, E.N.**  
Influence of large-scale atmospheric processes on the fluctuations of glaciers (1986, p.52-58, 179-185, eng) 41-1055
- Pantakhova, I.N.**  
Using stress transducers in predicting frost resistance of concrete (1985, p.85-88, rus) 41-1622
- Paquette, R.G.**  
Circulation and water masses of the East Greenland shelf (1987, p.6729-6740, eng) 41-4233  
MIZLANT 85 data report, results of an oceanographic cruise to the Greenland Sea, September 1985 (1986, 32p., eng) 41-1547
- Parameswaran, V.R.**  
Proceedings (1986, 168p., eng) 41-2507
- Pare, A.**  
Drilling of a well from a sprayed floating ice platform Cape Allison C-47 (1987, p.9-16, eng) 41-2396
- Paron, J.G.**  
Tidal spectrum underneath antarctic ice shelves (1986, p.13,001-13,009, eng) 41-1859
- Parfinkina, O.M.**  
Microorganisms in the communities of southern Taymyr tundras (1986, p.151-168, rus) 41-1339  
Structure of microbe associations and processes of natural substrate transformations under Arctic conditions (1986, p.101-103, rus) 41-3542
- Parish, T.R.**  
Surface windfield over the antarctic ice sheet (1987, p.51-54, eng) 41-3683
- Parker, L.V.**  
Ice nucleation activity of antarctic marine microorganisms (1985, p.126-128, eng) 41-2955  
Removal of trace-level organics by slow-rate land treatment (1986, p.1417-1426, eng) 41-1349  
Suitability of polyvinyl chloride well casings for monitoring munitions in ground water (1986, p.92-98, eng) 41-1345
- Parker, R.S.**  
Calibration procedure for a daily flow model of small watersheds with snowmelt runoff in the Green River coal region of Colorado (1985, 32p., eng) 41-3305
- Parkinson, C.L.**  
Arctic sea ice extent and drift, modeled as a viscous fluid (1986, p.71-98, eng) 41-2577  
Oceanographic influences on the sea ice cover in the Sea of Okhotsk (1981, 18p., eng) 41-4327  
On the relationship between atmospheric circulation and the fluctuations in the sea ice extents of the Bering and Okhotsk seas (1987, p.7141-7162, eng) 41-4267  
Seasonal and regional variations of Northern Hemisphere sea ice as illustrated with satellite passive-microwave data for 1974 (1987, p.119-126, eng) 41-4446
- Parmenter, B.S.**  
Use of a computer model to predict the formation of ice on road surfaces (1986, 19p., eng) 41-1412
- Parmenter-Holt, F.**  
Hydrologic and land sciences applications of NOAA polar orbiting satellite data (1985, 20p., eng) 41-976
- Parmuzin, S.I.U.**  
Influence of anthropogenic disturbances on the temperature field of permafrost (1986, p.206-212, rus) 41-2102  
Maps assessing the potential for the development of technogenic thermokarst in the north of western Siberia (1986, p.184-193, eng) 41-3198  
Regional regularities governing long-range freeze-thaw of ground due to economic development of northwestern Siberia (1986, p.176-183, rus) 41-2838  
Regionalization of northern West Siberia according to potential for thermokarst development (1986, p.78-85, rus) 41-3488
- Parrott, D.R.**  
Grand Bank pits: description and postulated origin (1986, p.73-77, eng) 41-3094  
Ice scour and seabed engineering; proceedings of a Workshop on Ice Scour Research (1986, 322p., eng) 41-3086  
Iceberg scouring rate studies, Grand Banks of Newfoundland (1987, p.825-833, eng) 41-4013
- Parsons, B.L.**  
Preliminary measurements of terminal crack velocity in ice (1987, p.233-238, eng) 41-3034
- Partington, K.C.**  
Analysis and simulation of altimeter performance for the production of ice sheet topographic maps (1986, p.141-145, eng) 41-757  
Mapping of Amery Ice Shelf, Antarctica, surface features by satellite altimetry (1987, p.183-188, eng) 41-4455
- Parungo, F.**  
Analysis of silver in individual ice particles after cloud seeding (1982, p.378-380, eng) 41-39  
Case study of hydrometeors in Florida cumuli (1982, p.366-369, eng) 41-36  
Nature of ice-forming nuclei in marine air masses (1987, p.291-309, eng) 41-4364
- Parungo, F.P.**  
Airborne measurements of the antarctic cloud water acidity (1985, p.201-203, eng) 41-3323  
Formation of frozen drops, conglomerates, and graupel (1984, p.103-105, eng) 41-4378
- Pashenko, A.E.**  
Kinetics of ice nucleation of aerosol particles in supercooled fog 2. Ice crystal growth and precipitations (1987, p.269-275, eng) 41-4363
- Pasqualucci, F.**  
Cloud particle identification near the melting layer with dual polarization K-band doppler radar (1982, p.412-415, eng) 41-46
- Pasquarell, G.C.**  
Winter flow, ice and weather conditions of the upper St. Lawrence River, 1971-81. Volume I: Ice cover charts (Part B) (1982, p.249-305, eng) 41-174
- Pass, H.**  
Combined Production and Storage System COMPASS—an advanced mobile production system (1986, p.633-659, eng) 41-1122
- Passarelli, R.E.**  
Three-parameter snow growth model (1982, p.197-200, eng) 41-14
- Paterson, W.S.B.**  
Flow near an ice divide: analysis problems and data requirements (1986, p.171-174, eng) 41-763  
Wisconsinian and pre-Wisconsinian ice thicknesses on Ellesmere Island, Canada: inferences from ice cores (1987, p.296-301, eng) 41-4079
- Patterson, C.C.**  
Lead concentration changes in antarctic ice during the Wisconsin/Holocene transition (1986, p.222-225, eng) 41-1630  
Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP (1987, p.1197-1202, eng) 41-4603
- Patterson, D.E.**  
Thermodynamics and mechanics of freezing soil around a pipeline (1986, 111p., eng) 41-3364
- Patterson, E.M.**  
Spectral density and distributions of intensity and phase of millimeter wave signals propagated through rain, fog, and snow (1986, p.6.5.1-6.5.4, eng) 41-99
- Patzelt, G.**  
Explanatory text to the map of Lewis Glacier, Mount Kenya, 1983 (1984, p.177-195, ger) 41-634  
Glaciers of the Austrian Alps, 1982/84 (1984, p.207-221, ger) 41-636
- Paukku, R.**  
Study of organochlorine pollutants in snow at North Pole (1987, p.24-31, eng) 41-3370
- Paulley, T.A.**  
Ice thickness inductor probe (1983, 10 col., eng) 41-1675
- Paulson, A.**  
Rubber-modified pavements for ice control in Alaska (1987, 2p., eng) 41-4578
- Paulson, C.A.**  
Observations of internal gravity waves under the Arctic pack ice (1987, p.779-782, eng) 41-2327
- Paulus, S.V.**  
Protecting searching devices of supersonic flaw-detection cars from icing (1986, p.121-125, rus) 41-2144
- Pautova, V.N.**  
Primary production in the Bratsk reservoir. Part 2. Assimilation of carbon by phytoplankton (1986, p.50-58, rus) 41-1834
- Pavel, A.**  
Effects of ice action under conditions of the lower connections of spherical liquefied-gas tanks (1986, p.628-630, rum) 41-3069
- Paving in Cold Areas Mini Workshop, 3rd, Ottawa, Ontario, July 20-22, 1987**  
Paving in cold areas (1987, 1027p. (2 vols.), eng) 41-4019
- Pavlenko, A.A.**  
Organization of earthwork for quarrying, melioration, and placing cohesive ground into impervious elements of the river-bed and left-side dams of the Kureyskaya hydroelectric power plant (1986, p.45-49, rus) 41-2868
- Pavlidis, I.U.A.**  
Shelf: the relief, sediments and their formation (1987, 205p. (Pertinent p.53-80), rus) 41-3688
- Pavliakov, S.I.**  
Frame of the main building of the Neryungri power plant (1986, p.13-17, rus) 41-1401
- Pavlov, G.D.**  
Water supply in populated points of northern regions (1987, p.6-8, rus) 41-3934
- Pavlova, K.K.**  
Using a model of capillary porous body for calculating water seepage into soil (1986, p.108-116, rus) 41-3589
- Pavlova, O.P.**  
Cryogenic structure of linear weathering crusts in the Stanovoi Range (1986, p.74-78, rus) 41-2822
- Pavlova, T.S.**  
Soil cover of the Bilimbaev model forest (1986, p.45-72, rus) 41-2875
- Pavskii, E.I.**  
Using barge-carrier systems in Arctic transportation (1985, p.62-67, rus) 41-492
- Payette, S.**  
Dating ice-wedge growth in subarctic peatlands following deforestation (1986, p.724-727, eng) 41-618  
Peat inception and climatic change in northern Quebec (1984, p.173-179, eng) 41-2006  
Vegetation of snow patches, Gulf of Richmond, northern Quebec (1986, p.1515-1524, fr) 41-2367
- Pchellintsev, A.M.**  
Hard coatings for diminishing frost heaving and foundation deterioration (1985, p.49-51, rus) 41-300  
Shields designed to counteract frost heave (1985, p.41-42, rus) 41-294
- Pchelkina, I.U.V.**  
Dust control in coal quarries at subzero temperatures (1985, p.153-154, rus) 41-2774
- PCSP's floating research station**  
PCSP's floating research station (1987, p.6, eng) 41-2320
- Peabody, C.**  
Municipal decision making and the role of salt in snow and ice control in Ontario (1979, 68p., eng) 41-236
- Pearson, D.E.**  
Temperature, salinity and density profiles around icebergs in the Labrador Sea (1986, p.472-491, eng) 41-160
- Pease, C.H.**  
Prediction of vessel icing (1986, p.1793-1806, eng) 41-2845  
Sea ice drift near Bering Strait during 1982 (1987, p.7107-7126, eng) 41-4265  
Size of wind-driven coastal polynyas (1987, p.7049-7059, eng) 41-4260
- Pecher, K.**  
Tracing faecal pollution by coprostanol and intestinal bacteria in an ice-covered Finnish lake loaded with both industrial and domestic sewage (1986, p.131-149, eng) 41-2477
- Peck, E.L.**  
Remote sensing and hydrologic models (1982, 179p., eng) 41-3256
- Peck, L.**  
Microstructure and the resistance of rock to tensile fracture (1985, p.11,533-11,546, eng) 41-496
- Pedersen, K.B.**  
Frost insulation in rock tunnels (1986, p.15-18, eng) 41-2261
- Pederzoli, P.**  
Density of accreted ice (1986, p.1081-1090, eng) 41-1476
- Pedley, M.**  
Tidal spectrum underneath antarctic ice shelves (1986, p.13,001-13,009, eng) 41-1859
- Peippo, J.**  
Riverbank erosion in the Colville Delta, Alaska (1987, p.61-70, eng) 41-3555
- Peirce, J.C.**  
M.V. Arctic-spring 1986 performance trials voyage report (1986, 30p., eng) 41-695
- Peirce, T.H.**  
M.V. Arctic-spring 1986 performance trials voyage report (1986, 30p., eng) 41-695

- Pelletier, B.R.**  
Seafloor morphology and sediments [1986, p. 43-162, eng] 41-2595
- Peltier, W.R.**  
Sensitivity experiments with a model of the ice age cycle: the response to Milankovitch forcing [1987, p.1351-1374, eng] 41-4053
- Pelto, M.S.**  
Mass balance of south-east Alaska and north-west British Columbia glaciers from 1976 to 1984: methods and results [1987, p.189-194, eng] 41-4456
- Pen, W.**  
Experimental study on frost susceptibility of wind-blown sands [1986, p.233-238, chi] 41-1421
- Peña, H.**  
Aspects of glacial hydrology in Patagonia [1987, p.141-150, eng] 41-3839  
Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield [1987, p.133-140, eng] 41-3838
- Pendia, V.V.**  
Possibilities of the landscape-indication method for engineering-geological studies of northern West Siberia [1987, p.15-29, rus] 41-4621
- Peng, G.**  
Some relationship between antarctic ice extent and climate [1983, p.303-309, chi] 41-673
- Penner, E.**  
Aspects of ice lens growth in soils [1986, p.91-100, eng] 41-1308  
Ice lensing in layered soils [1986, p.334-340, eng] 41-1159
- Penningroth, K.J.**  
Automated data acquisition for structural snow loads [1984, p.26-36, eng] 41-1944
- Perchanok, M.S.**  
Merchant ship ice navigation studies in the Canadian Arctic [1986, p.859-877, eng] 41-2062
- Perepezko, J.H.**  
Grain growth in polar ice: Pts. 1 and 2 [1986, p.415-433, eng] 41-4297
- Perra, W.G.**  
Frost bulb with or without groundwater flow on a buried chilled Alaskan pipe [1984, p.1850-1855, eng] 41-457
- Pereselenkova, I.G.**  
Planning the distribution of settlements when designing railroads for little-explored regions [1984, p.34-41, rus] 41-2454
- Pereverzev, V.N.**  
Biologic recultivation of industrial tailings in the Far North [1986, 104p., rus] 41-2752  
Studying comparative intensity of peat mineralization in soils of the Kola Peninsula and southern Karelia [1986, p.64-72, rus] 41-4116
- Perevoshchikova, T.P.**  
Changes in the Anuchin and Chernov glaciers, Polar Urals, for the last 20 years [1986, p.96-99, rus] 41-1646
- Pérez, P.J.**  
Study of the fit of various statistical distributions to ice nuclei concentration data [1984, p.135-140, spa] 41-2749
- Perham, R.E.**  
Determining the effectiveness of a navigable ice boom [1985, 28p., eng] 41-446  
Short-pulse radar investigations of freshwater ice sheets and brash ice [1986, 10p., eng] 41-594
- Perkin, R.G.**  
Ice pumps and their rates [1986, p.11,756-11,762, eng] 41-1024
- Perkins, E.J.**  
Biologic accumulation and monitoring of chemical wastes in arctic waters [1986, p.1-11, eng] 41-340
- Perovich, D.K.**  
Role of shortwave radiation in the summer decay of a sea ice cover [1987, p.7032-7044, eng] 41-4258
- Perraton, D.**  
Scaling tests of silica fume concrete and the critical spacing factor concept [1987, p.1155-1182, eng] 41-3722
- Perrin, R.**  
Measurement and investigation of primary production of the inshore water near Davis, Antarctica [1986, p.38-43, chi] 41-398
- Perrin, R.A.**  
Seasonal variation in marine phytoplankton and ice algae at a shallow antarctic coast site [1987, p.33-46, eng] 41-4084
- Perron, N.**  
Triaxial testing of first-year sea ice [1986, 41p., eng] 41-2547
- Perron, N.M.**  
Mechanical properties of multi-year sea ice. Phase I: Ice structure analysis [1987, 30p., eng] 41-4143
- Perroud, P.**  
Wind studies center in the Croix de Chamrousse (Isère) mountain environment [1986, p.51-54, fre] 41-3357
- Perry, S.J.**  
Model of the orographic enhancement of snowfall [1984, p.609-611, eng] 41-4408
- Pershits, R.I.A.**  
Providing controllability for an icebreaker running astern in heavy ice [1986, p.8-10, rus] 41-1576
- Pertsiger, F.I.**  
Long period regime of a drifted snow field [1986, p.117-123, rus] 41-782
- Peashev, N.G.**  
Formation and development of the Kola Mining Complex [1986, 123p., rus] 41-4556
- Petelin, I.U.N.**  
Evaluating the state of gas pipelines from space photographs [1986, p.27-29, rus] 41-3212
- Petenkov, A.V.**  
Scheme for predicting flood runoff for unstudied rivers of Eastern Siberia [1986, p.37-45, rus] 41-599  
Solutions of some hydrologic problems for unexplored rivers in eastern Siberia [1986, p.132-136, rus] 41-1371
- Peters, G.R.**  
Hydrodynamic forces and iceberg stability [1986, p.60-62, eng] 41-3092
- Peters, N.E.**  
Concentration and flux of solutes from snow and forest floor during snowmelt in the West-Central Adirondack region of New York [1987, p.209-224, eng] 41-3404  
Sources of acidity during snowmelt at a forested site in the west-central Adirondack Mountains, New York [1987, p.99-108, eng] 41-4315
- Petersen, G.H.**  
Energy-flow budgets in aquatic ecosystems and the conflict between biology and geophysics about earth-axis tilt [1984, p.621-633, eng] 41-2010
- Petersen, R.L.**  
Simulating snow loads on fabric roofs [1986, p.894-901, eng] 41-100
- Peterson, I.K.**  
Proceedings [1986, 668p., eng] 41-142
- Peterson, K.M.**  
Influence of water table and atmospheric CO<sub>2</sub> concentration on the carbon balance of arctic tundra [1984, p.331-335, eng] 41-1234
- Peterson, S.**  
CATSCO: remote all terrain heavy transportation [1986, p.670-678, eng] 41-2050
- Peterson, W.L.**  
Late Wisconsinan glacial history of northeastern Wisconsin and western Upper Michigan [1986, 14p., eng] 41-974
- Petit, J.R.**  
Investigation by analytical transmission electron microscopy of individual insoluble microparticles from antarctic (Dome C) ice core samples [1986, p.250-261, eng] 41-1755  
Long-term climatic changes indicated by crystal growth in polar ice [1987, p.62-64, eng] 41-2750
- Petrak, A.**  
Ice detection systems—experimental feature. Final report [1986, 11p. + append., eng] 41-3510
- Petrenko, N.R.**  
Methods and equipment for obtaining artificial snow (granulated ice) [1986, p.43-59, rus] 41-2153  
Testing the experimental assembly for manufacturing artificial snow on dredge proving-grounds [1986, p.78-80, rus] 41-2157
- Petropavlovskaya, M.S.**  
Application of space imagery to geocryologic mapping [1985, p.187-195, eng] 41-1445  
Drifting of snow in Northern Kazakhstan [1986, p.67-74, eng] 41-3680  
Modeling the process of water yield from snow cover [1986, p.37-46, rus] 41-3586  
Snow cover regime of the northern and central Kazakhstan [1986, p.3-22, rus] 41-3584
- Petrosian, L.R.**  
Failure of frozen soils by high-pressure hydraulic jets in trench and pit construction [1986, p.194-197, eng] 41-2946  
Use of hydrojet technology for pile foundation construction in the north of West Siberia [1986, p.39-41, eng] 41-1849
- Petrov, A.A.**  
Mathematical modelling. Processes in complex economic and ecological systems [1986, 295p., rus] 41-547  
Tractive power of walking all-terrain vehicles designed for swamps [1987, p.22-24, rus] 41-3984
- Petrov, A.G.**  
Calculating meteorological elements over the Okhotsk Sea [1986, p.3-9, rus] 41-2721
- Petrov, B.G.**  
Using thermopiles in cooling plastic frozen ground [1983, p.94-107, rus] 41-4480
- Petrov, E.E.**  
Numerical methods for predicting and controlling thermal regime of rocks in permafrost areas [1986, 94p., rus] 41-2745
- Petrov, I.M.**  
Economic effectiveness of the mobile-crew and modular construction methods of heat and electric power plants in western Siberia [1986, p.49-51, rus] 41-882
- Petrov, L.S.**  
Long-term variability of temperature, pressure and ice conditions in the South Orkney Islands [1986, p.59-65, eng] 41-3950
- Winter climatic conditions in Somov Sea based on the drift data of d/e the Ob' in 1973 [1986, p.72-79, eng] 41-3951
- Petrov, N.A.**  
Bulletin of scientific-technical information. Power engineering of Southern Yakutia [1984, 32p., rus] 41-1829  
Development of power engineering in the Yakut ASSR related to the Baykal Amur Railroad construction. Collection of scientific papers [1985, 101p., rus] 41-1925
- Petrov, V.N.**  
Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core [1987, p.318-321, eng] 41-2505  
Effect of mass balance changes on fluctuations of an ice sheet interacting with the sea [1986, p.131-136, 247-250, eng] 41-1068  
Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP [1987, p.1197-1202, eng] 41-4603
- Petrov, V.P.**  
Properties of combined aggregate concretes of centrifuged power line supports [1985, p.5-11, rus] 41-1542
- Petrov, V.S.**  
Development of frost heave deformations in freezing, coarse-clastic ground [1985, p.89-91, rus] 41-319  
Improving the ultra-high frequency technique of groove-sampling in northern mines [1986, p.10-15, rus] 41-4549
- Petrova, A.A.**  
Use of spectral-correlation analysis in preliminary stages of investigations [1978, p.93-98, rus] 41-1000
- Petrova, M.A.**  
Development of frost heave deformations in freezing, coarse-clastic ground [1985, p.89-91, rus] 41-319
- Petrova, R.G.**  
Criteria indicating the presence of taliks in permafrost [1986, p.49-53, rus] 41-2536
- Pettre, P.**  
Accumulation distribution in Terre Adélie, Antarctica: effect of meteorological parameters [1986, p.486-500, eng] 41-4304
- Peureux, J.C.**  
Levels of services in winter road maintenance [1986, p.30-33, ita] 41-866
- Péwé, T.L.**  
China expands research in frozen ground: a report of the third Chinese conference on permafrost [1986, p.89-95, eng] 41-3529  
Permafrost advances: report of the fourth International Conference on Permafrost [1986, p.223-233, eng] 41-3583
- Pfism, J.C.**  
New clues for decoding hailstone structure [1982, p.446-449, eng] 41-54  
Sensitivity of hailstone growth to variations in microphysical parameters [1982, p.438-441, eng] 41-52
- Pham, T.C.**  
Functional description for modification of the polar ice forecast subsystem—Arctic [1981, 20p., eng] 41-2191
- Phang, W.A.**  
Thermally associated fatigue crack growth through asphalt overlays: an experimental investigation [1987, p.453-491, eng] 41-4032  
Transient effects in low temperature induced failure and fracture initiation in a pavement structure [1987, p.277-301, eng] 41-4026
- Phetteplace, G.**  
Contribution of snow to ice bridges [1987, p.133-137, eng] 41-2414  
Heat distribution research [1986, p.2-3, eng] 41-407  
Water-source heat pumps [1986, p.14-15, eng] 41-408
- Phifer, E.H.**  
Creep analysis of a first-year sea ice sheet [1987, p.351-356, eng] 41-2442
- Philleo, R.**  
Frost susceptibility of high-strength concrete [1987, p.819-842, eng] 41-3708
- Phillippi, H.L.**  
Hazards assessment for a crude oil storage facility operating in an Arctic environment [1987, p.63-67, eng] 41-2403
- Phillips, L.D.**  
Dynamic ship/ice impact—results of parametric model testing [1986, p.349-363, eng] 41-1604  
Model studies of ice interaction with ship rudders and steering systems [1986, 2 vols., eng] 41-3372
- Piatkov, V.G.**  
Scientific basis for the processes of upbuilding frozen water-ice foams on ground and their practical application [1986, p.66-72, rus] 41-2155
- Piatova, R.B.**  
Some properties of the regime of a stable snow cover in the Hindukush Mountains [1986, p.73-78, rus] 41-1641
- Pilavchenko, N.I.**  
Influence of industrial wastes on vegetation of northern forest ecosystems [1987, p.143-147, rus] 41-4570  
Rational use and preservation of ecosystems in the North [1985, p.68-75, rus] 41-3437
- Pichuev, V.I.**  
Using artificial snow for dust control during mass-detonations in mines [1986, p.197-200, rus] 41-2178

- Pichnev, V.V.**  
Influence of suprapermfrost ground waters on the properties of seasonally thawing ground [1985, p.86-87, rus] 41-317
- Pichagis, A.P.**  
Influence of the atmosphere and snow cover on the emissive properties of ice [1986, p.119-123, rus] 41-703
- Pick, A.R.**  
Design of Norman Wells pipeline for frost heave and thaw settlement [1986, p.67-85, eng] 41-2516  
Norman Wells Pipeline Project [1986, p.61-66, eng] 41-2515
- Pierson, D.C.**  
Chemistry of a temperate pond's decaying winter cover [1984, p.139-142, eng] 41-1954
- Pigeon-Gosselin, M.**  
Nature of the 'free' OH groups in water [1986, p.341-344, eng] 41-525
- Pigeon, M.**  
Effects of freeze-thaw cycles on the microstructure of hydration products [1986, p.1-19, eng] 41-4141  
Freeze-thaw durability of concrete with and without silica fume in ASTM C 666 (procedure A) test method: internal cracking versus scaling [1986, p.76-85, eng] 41-2897  
Scaling tests of silica fume concrete and the critical spacing factor concept [1987, p.1155-1182, eng] 41-3722
- Pigida, E.I.U.**  
Rock failure under thermo-cyclic loads [1987, 248p., rus] 41-4152
- Pihkala, P.**  
Studies of the mechanical properties of cross-country skis [1986, 24p., eng] 41-3802
- Pikal, J.L., Jr.**  
Point probability distributions of frozen soil [1986, p.1681-1686, eng] 41-2501
- Pilkington, R.**  
Estimating ice-scour frequency and risk to buried pipelines [1986, p.213-220, eng] 41-3113
- Pillbury, R.D.**  
Ross Sea oceanography, 1985 [1985, p.112-113, eng] 41-2951
- Pilon, J.A.**  
Ground probing radar in the investigation of the competency of frozen tailings pond dams [1987, p.191-197, eng] 41-4012
- Pinalgin, B.A.**  
Selection of optimal dimensions for hydraulic structures in ports [1986, p.77-81, rus] 41-1396
- Plankner, V.A.**  
Frost resistance of autoclaved materials [1986, p.31-39, rus] 41-4501
- Platner, R.M.**  
Nature of fines produced in aggregate processing [1987, p.10-21, eng] 41-2765
- Piper, D.J.W.**  
Study of iceberg scours across the continental shelf and slope off southeast Baffin Island using the Sea MARC I midrange sidescan sonar [1987, p.847-857, eng] 41-4014
- Pipes, R.B.**  
Environmental exposure of carbon/epoxy composite material systems [1982, p.137-147, eng] 41-1991
- Pirtz, D.**  
Behavior of prestressed lightweight concrete subjected to high-intensity cyclic stress at cryogenic temperatures [1986, p.727-736, eng] 41-1865
- Plasia, P.**  
Binding modes of water in plant leaves: a dielectric study [1987, p.119-125, eng] 41-2223  
Multiplicity of dielectric relaxation times of dispersed ice microcrystals [1987, p.195-211, eng] 41-4361
- Pite, H.D.**  
Field observations of flow patterns generated by an ice keel in stratified flow [1986, p.328-349, eng] 41-154
- Pitt, J.M.**  
Performance of soil-aggregate-fabric systems in frost-susceptible roads, Linn County, Iowa [1981, p.6-14, eng] 41-1038
- Pitter, R.L.**  
Investigations of riming and snowflake electrification in stratiform clouds [1982, p.568-569, eng] 41-68
- Pivovarov, Zh.F.**  
Floristic composition and phytocenotic organization of algal groupings in Alpine steppes of northeastern Asia [1986, p.521-527, rus] 41-992
- Pizhankov, N.M.**  
Conditions of upbuilding and properties of artificial sea-water ice [1986, p.140-146, rus] 41-2167  
Structure and mechanical properties of artificial ice [1986, p.169-176, rus] 41-2837  
Using a three-dimensional sea-water freezing technique in building artificial ice structures [1986, p.172-176, rus] 41-2173
- Plaha, J.**  
Resistance of concrete pavements to frost, and chemical deicing agents [1987, p.87-92, ger] 41-3547
- Planas, J.**  
Behavior at cryogenic temperatures of steel for concrete reinforcement [1986, p.405-411, eng] 41-2071
- Thermal deformation of loaded concrete at low temperature.  
2. Transverse deformation [1986, p.741-748, eng] 41-1999
- Thermal deformation of loaded concrete at low temperature.  
3. Lightweight concrete [1986, p.845-852, eng] 41-2001
- Thermal deformation of loaded concrete during thermal cycles from 20 C to -165 C [1984, p.639-644, eng] 41-2003
- Plastina, L.A.**  
Combined methods of studying nival-glacial relief-forming processes in mountainous areas of the Baykal Amur railroad areas (Northern Transbaikalia) [1986, p.82-86, rus] 41-3519
- Spaceborne photography methods of monitoring geosystems in the new economic development areas of Siberia [1986, p.9-14, rus] 41-3514
- Platford, R.F.**  
Hypersaline gradients in two Canadian High Arctic lakes [1986, p.1795-1803, eng] 41-1222
- Platonov, V.F.**  
Caterpillar and wheeled hauling tractors [1986, 295p., rus] 41-1688
- Pleau, R.**  
Freeze-thaw durability of concrete with and without silica fume in ASTM C 666 (procedure A) test method: internal cracking versus scaling [1986, p.76-85, eng] 41-2897  
Scaling tests of silica fume concrete and the critical spacing factor concept [1987, p.1155-1182, eng] 41-3722
- Pletzer, R.**  
Polymorphism in vapor deposited amorphous solid water [1985, p.81-88, eng] 41-1698
- Plitkin, G.A.**  
Calculating river runoff and its long-period variations in arid and humid regions [1986, p.122-130, rus] 41-815  
Regularities governing the formation of river water resources in Siberia [1986, p.171-180, rus] 41-1374
- Plotnikov, K.S.**  
Icebreaker pilotage of "Dmitrii Donskoi" type ships along the Yenisey River in the winter-spring season [1986, p.98-103, rus] 41-3384
- Plotnikova, T.A.**  
Current problems in humus formation [1986, 172p., rus] 41-4563
- Pluchino, A.**  
Scattering photometer for measuring single ice crystals and evaporation and condensation rates of liquid droplets [1987, p.614-620, eng] 41-3153
- Pod'iashev, G.P.**  
Preservation of protective forest vegetation [1986, p.15, rus] 41-514
- Podbornyi, E.E.**  
Geothermal investigations of perennially frozen strata of the Fur-Nadym interfluvium [1986, p.95-100, rus] 41-2538
- Podkopayeva, L.D.**  
Mass balance and trends in glacier changes in the USSR [1986, p.43-59, rus] 41-775  
Water resources in glaciers of the Syrdaria River basin [1986, p.80-88, rus] 41-778
- Podlesnaya, N.I.**  
Biologic recultivation of industrial tailings in the Far North [1986, 104p., rus] 41-2752
- Podmoshenskii, I.V.**  
Formation of a microscopic ice filament in an electric field [1985, p.619-620, eng] 41-2330
- Podval'nyi, A.M.**  
Service life of flexible elements subject to freeze-thaw cycles [1986, p.19-20, rus] 41-3207
- Podzimek, J.**  
Aerodynamic conditions of ice crystal growth by aggregation and droplet deposition [1984, p.173-176, eng] 41-4385
- Study of the motion of bodies simulating the fall of ice crystals [1982, p.103-106, eng] 41-7
- Pogrebetskii, I.U.E.**  
Seas of the Soviet Arctic. Vol.9 [1984, 280p., rus] 41-571
- Pohle, G.**  
Studies on the residual effects of de-icing salts [1986, p.5-12, ger] 41-2325
- Polnaisnion, C.**  
Neutron scattering of supercooled water in silica gels [1986, p.3447-3459, eng] 41-2479
- Poirier, J.P.**  
Creep of high-pressure ice VI [1985, p.109-118, eng] 41-1700
- Pokrovskaya, V.N.**  
Pipeline transport in mining industry [1985, 193p., rus] 41-2712
- Pokrovskii, L.I.**  
Efficiency of using foam plastics as hydro-thermoinsulative materials for electrical heating plants [1986, p.17-18, rus] 41-2795
- Polar Research Laboratory, Inc.**  
Analysis of NavSat buoy position data from the southeastern Beaufort Sea, 1980. Vol.1. Overview, data, and primary results [1981, 136p., eng] 41-3381  
Analysis of NavSat buoy position data from the southeastern Beaufort Sea, 1980. Vol.2. Detailed results: 140 translocation fixes (part A) [1981, 236p., eng] 41-3475
- Analysis of NavSat buoy position data from the southeastern Beaufort Sea, 1980. Vol.3. Detailed results: all 271 fixes (part A) [1981, 173p., eng] 41-3476  
Analysis of NavSat buoy position data from the southeastern Beaufort Sea, 1980. Vol.3. Detailed results: all 271 fixes (part B) [1981, 173p., eng] 41-3477  
Analysis of NavSat buoy position data from the southeastern Beaufort Sea, 1980. Vol.4. Program listings [1981, 66p., eng] 41-1766  
Analysis of NavSat buoy position data from the southeastern Beaufort Sea, 1980. Vol.5. Estimates of measurement variances [1981, 31p., eng] 41-3478
- Pol'evko, V.P.**  
State of corrugated metal culverts during operation [1986, p.12-13, rus] 41-1531
- Polnikov, B.I.**  
Improvement of technology and quality control of concreting moorings in the northeastern Ob-Irtys'k Basin [1986, p.59-68, rus] 41-2910
- Polnikov, V.A.**  
Establishing the origin of ground ice according to the content of heavy oxygen isotopes and deuterium [1985, p.66-68, rus] 41-3536  
Isotope composition of ground ice on the Yamal Peninsula [1985, p.142-143, rus] 41-3537  
Using stable isotopes in studying ground ice [1986, p.92-97, rus] 41-112
- Polikova, E.I.**  
Climate and ground ice in northern West Siberia in the Late Pleistocene-Holocene [1986, p.61-65, rus] 41-106  
Climate and ground ice in the north of Western Siberia in the Late Pleistocene and Holocene [1986, p.303-308, eng] 41-3621
- Pollan, G.**  
Long-range transport of continental radon in subantarctic and antarctic areas [1986, p.178-189, eng] 41-1750
- Polishchuk, A.I.**  
Construction of low-rise buildings on seasonally freezing gravelly grounds [1985, p.30-32, rus] 41-289
- Polivovich, M.K.**  
Characteristics of icing conditions in wintertime stratiform clouds [1982, p.404-407, eng] 41-44  
Microphysical influences on aircraft icing [1982, p.420-422, eng] 41-47
- Polivka, M.**  
Behavior of prestressed lightweight concrete subjected to high-intensity cyclic stress at cryogenic temperatures [1986, p.727-736, eng] 41-1865
- Polkoshnikova, O.V.**  
Vegetation changes in the Samotlor swamp (West Siberia) under the influence of engineering projects [1982, p.198-209, eng] 41-2344
- Poljak, K.D.**  
Forecasting ice thickness and concentration in the Arctic using a numerical model [1986, p.155-164, eng] 41-2657
- Pollen, M.R.**  
Final cleanup at selected (1975-1981) wellsites, sampling and testing of water and bottom muds in the reserve pits and the recording of tundra plant responses on the National Petroleum Reserve in Alaska (NPRA). Vol.2 Sampling and testing of waters and bottom muds in the reserve pits [1986, 164p. + append., eng] 41-2451
- Pollinger, W.**  
Bispectral method for the height determination of optically thin ice clouds [1984, p.827-830, eng] 41-4422
- Polonskii, G.L.**  
Determining conditions for rational operation of rippers [1978, p.49-52, rus] 41-1320
- Polonskii, L.L.**  
Lift-slab method of erecting a 30-story building in Krasnoyarsk [1986, p.14-16, rus] 41-888
- Polonskii, V.P.**  
Research in building engineering. Structural thermodynamics. Service life of structures [1986, 179p., rus] 41-4500
- Polosukhin, V.P.**  
Signs of "semiarid" pediplanation on Mars [1987, p.79-85, rus] 41-4497
- Polovinko, V.A.**  
Improving the performance of ripper-equipped bulldozers under conditions of Siberia and the North [1987, p.26-27, rus] 41-4122
- Polozova, T.G.**  
Forest fire effect on southern subarctic tundras in western Chukotsky Peninsula [1986, p.1657-1663, rus] 41-3025  
Forms of vascular plants in the southern tundra subzone of Taymyr [1986, p.122-134, rus] 41-1337
- Poltev, M.P.**  
Engineering geology in construction [1986, 175p., rus] 41-2889
- Polubokov, V.A.**  
Improving the technology of building long crossings of overhead lines across water bodies [1987, p.2-9, rus] 41-3611
- Pomortsev, O.A.**  
Hydrometeorological regime and dynamics of Lake Issyk-Kul [1988, 153p., rus] 41-3870

- Pomortsev, O.A. (cont.)**  
Intrasecular glacier variations in northern Tien Shan according to lichenometric data [1986, p.403-412, rus] 41-886  
Reconstruction of environmental conditions of the north slope glaciers of the Terskey Ala-Tau Range from dendrologic data [1987, p.235-242, rus] 41-4153
- Ponomarenko, I.U.F.**  
Improvement of parameters and increase in the reliability of mining machines [1986, 82p., rus] 41-4524
- Ponomarev, F.D.**  
Determination of the deformation characteristics of permafrost by the method of probe thawing [1987, p.248-251, eng] 41-4166
- Ponomarev, O.I.**  
Nondestructive control of the quality and bearing strength of driven reinforced concrete piles [1986, p.62-63, rus] 41-883
- Ponomareva, O.E.**  
Space variations in engineering-geological properties of Quaternary deposits in central Yakutia [1986, p.66-74, rus] 41-2821
- Poole, L.R.**  
Characteristics of Arctic polar stratospheric clouds as measured by airborne lidar [1986, p.2149-2161, eng] 41-2550
- Poon, S.C.**  
Development of a method to evaluate the low temperature tensile properties of asphalt concrete [1986, p.156-189, eng] 41-2204
- Poots, G.**  
Ice accretion on cables of various cross-sections [1986, p.11-28, eng] 41-3796
- Popa Potino, I.A.**  
Ground-based detection of aircraft icing conditions using microwave radiometers [1986, p.975-982, eng] 41-2302
- Poplavskaya, L.K.**  
Modeling meltwater runoff in mountain catchment areas from satellite data [1986, p.16-29, rus] 41-2733
- Poplavskii, V.A.**  
Using the blow-out method in open mining of placer deposits [1986, p.48-54, rus] 41-2904
- Poplin, J.P.**  
Thermal ice drill for profiling thick multiyear ice [1987, p.1-11, eng] 41-4211
- Popov, A.**  
Low temperature X-ray analysis of water/poly(oxyethylene) systems [1986, p.628-634, eng] 41-2573
- Popov, A.E.**  
Cluster analysis of airborne-radar images of ice covers [1986, p.64-72, rus] 41-2718
- Popov, A.F.**  
Construction properties of grey clayey ground [1986, p.16-22, rus] 41-3393
- Popov, A.I.**  
Dislocations and permafrost development in the Pleistocene deposits of northern USSR [1986, p.146-153, rus] 41-3429
- Popov, B.A.**  
Geographic studies of coastal zones of Arctic seas [1986, p.5-7, rus] 41-4061
- Popov, G.N.**  
Design model of a percussion machine for soil compaction [1986, p.103-107, rus] 41-1394
- Popov, I.K.**  
Estimate of number of icebergs in the southern ocean [1986, p.85-87, rus] 41-4191
- Popov, N.I.**  
Calculating wind loads on power line supports, allowing for icing [1986, p.66-68, rus] 41-885
- Popov, N.V.**  
Artificial drainage of a burst-threatening lake located at the foot of a surging glacier [1986, p.108-110, 220-221, rus] 41-4352
- Popov, S.F.**  
Peculiarities of rock pressure development in mining excavations when the roof is a difficultly caving permafrost [1985, p.93-97, rus] 41-195
- Popov, S.N.**  
Frost-resistant fluoroplastic seals for arctic machinery [1986, p.933-951, eng] 41-1139
- Popov, V.V.**  
Slag-pumice concrete for industrial construction [1986, 84p. (Pertinent p.70-84), rus] 41-3022
- Popova, E.P.**  
Biologic activities of pine forest soils in the Irkutsk Priangarye [1985, p.47-54, rus] 41-4111
- Popovics, S.**  
Classification of the deterioration of concrete based on mechanism [1987, p.131-142, eng] 41-3692
- Popovnin, V.V.**  
Role of debris cover in the thermal physics of glaciers [1986, p.255-266, eng] 41-687
- Popovskii, B.V.**  
Construction of steel reservoirs under northern conditions [1985, p.28-34, rus] 41-2848
- Popp, C.**  
Problems of drainage and winter service in noise-diminishing road surfaces [1986, p.536-540, ger] 41-2324
- Porcheron, Y.**  
Design of transmission overhead lines: more satisfactory behavior of the French network since 1972 [1986, p.14-22, fre] 41-1561
- Porchet, M.**  
Curved glass ice-scraper [1983, 2 col., eng] 41-1672
- Poroshin, V.G.**  
Main trends of the offshore oil and gas production structures—development for the freezing sea conditions [1986, p.160-166, eng] 41-2271
- Porozhnikova, O.M.**  
Conditions for the development of Late Pleistocene cryogenic formations in the central Russian plain [1986, p.90-100, rus] 41-4469
- Posel'skii, F.F.**  
Reliability and durability of metal structures of industrial buildings in the Yakut ASSR [1985, p.37-47, rus] 41-2849
- Posay, P.G.**  
Forecasting ice thickness and concentration in the Arctic using a numerical model [1986, p.155-164, eng] 41-2657
- Poslovina, A.L.**  
Content of mercury in the snow cover of Pribaykal'e [1987, p.56-60, rus] 41-3946
- Postawko, S.E.**  
Mars: long term changes in the state and distribution of H<sub>2</sub>O [1985, p.535-564, eng] 41-1723
- Postol, V.I.**  
Tribotechnical properties of fluoroplastic-4 and super-high molecular polyethylene in contact with ice and snow [1984, p.8-10, rus] 41-4505
- Potapenko, V.I.U.**  
Effect of mass balance changes on fluctuations of an ice sheet interacting with the sea [1986, p.131-136, 247-250, eng] 41-1068
- Potapov, V.A.**  
Estimate of number of icebergs in the southern ocean [1986, p.85-87, rus] 41-4191
- Potila, A.**  
Offshore technology in Finland—present state and future perspectives [1986, p.25-35, eng] 41-2264
- Potter, J.R.**  
Tidal spectrum underneath antarctic ice shelves [1986, p.13,001-13,009, eng] 41-1859
- Pounder, E.R.**  
Physical oceanography near the North Pole [1986, p.11,763-11,773, eng] 41-1025
- Powell, L.A.**  
Digital radar system for echo studies on ice sheets [1987, p.206-210, eng] 41-4459
- Powell, R.D.**  
Modern glaciary environments [1987, p.23-25, eng] 41-4097
- Power, J.M.**  
Role of major floods in glacier basins [1986, p.82-87, 195-200, rus] 41-4346
- Powers, D.J.**  
Natural convection in sloping porous layers [1986, p.697-710, eng] 41-608
- Pozdeev, A.A.**  
All-Union tutorial seminar on mathematical modeling in science and technology. Summaries [1986, 333p., rus] 41-2381
- Pozdniakov, I.V.**  
Differentiations of seasonally and perennially frozen rocks in Severnoe Priamur'e [1986, p.96-106, rus] 41-3490
- Pozdniakov, L.K.**  
Forestry in permafrost regions [1986, 192p., rus] 41-1343
- Pozlutko, S.G.**  
Determining optimal parameters of thermal protection for dredging grounds [1986, p.214-217, rus] 41-2181
- Poznanin, V.L.**  
Development and regime of thermal erosion in the BAM zone [1986, p.138-142, rus] 41-2831
- Poznanin, V.L.**  
Investigation of waters in the seasonal thaw layer and naled formation in the Charskaya Basin [1986, p.142-147, rus] 41-2832
- Poznanin, V.L.**  
Snow cover effect on some cryogenic processes in the BAM zone [1986, p.125-128, rus] 41-1652
- Prag, D.**  
Study of iceberg scours across the continental shelf and slope off southeast Baffin Island using the Sea MARC I midrange sidescan sonar [1987, p.847-857, eng] 41-4014
- Prasad, D.**  
Microbial aspects of the Inuvik sewage lagoon [1986, p.117-128, eng] 41-349
- Prasad, K.S.R.**  
Some factors influencing iceberg scour estimates [1986, p.234-239, eng] 41-849
- Preisendorfer, R.W.**  
Prediction of vessel icing [1986, p.1793-1806, eng] 41-2845
- Preller, R.H.**  
Forecasting ice thickness and concentration in the Arctic using a numerical model [1986, p.155-164, eng] 41-2657
- Prestud, S.**  
Dynamics of periglacial sorted circles in western Spitsbergen [1986, p.81-99, eng] 41-792
- Price, E.B.**  
Gravity base of offshore production platform with ice-penetrating peripheral nose sections [1983, 8 col. + figs., eng] 41-1670
- Price, L.W.**  
Turf-banked terraces in the Olympic Mountains, Washington, U.S.A. [1985, p.261-270, eng] 41-1247
- Price, P.S.J.**  
Pipeline codes and structural criteria for pipelines in Arctic and earthquake regions [1987, p.89-97, eng] 41-4629
- Primerov, S.N.**  
Improving the performance of ripper-equipped bulldozers under conditions of Siberia and the North [1987, p.26-27, rus] 41-4122
- Prinsenberg, S.**  
Overview of project to measure ice forces at Adams Island [1986, p.651-663, eng] 41-171
- Prinsenberg, S.J.**  
Effects of the annual ice-cover on tidal currents and freshwater content of Canadian inland waters [1986, p.298-327, eng] 41-153
- Prior, M.J.**  
Wind-chill indices—a review [1987, p.1-17, eng] 41-3576
- Pritchard, R.S.**  
Forecasting summer ice conditions in the Beaufort Sea [1987, p.371-377, eng] 41-2445
- Prizmazonov, A.M.**  
Design of tall railroad embankments on weak bases [1986, p.5-6, rus] 41-1530
- Prübstle, E.**  
Effect of snow-cover blasting on erosion [1984, p.181-190, ger] 41-713
- Prodi, F.**  
Crystal structure of ice accreted on an ice substrate [1987, p.120-122, eng] 41-3604
- Prodi, F.**  
Density of accreted ice [1986, p.1081-1090, eng] 41-1476
- Prodi, F.**  
Ice accretions on fixed cylinders [1986, p.1091-1109, eng] 41-1477
- Prodi, F.**  
Properties of ice accreted in a two stage growth [1984, p.283-286, eng] 41-4401
- Prodi, F.**  
Properties of ice accreted in two-stage growth [1986, p.1057-1080, eng] 41-1475
- Prokhorov, I.U.M.**  
Start-up dynamics of an arterial heat pipe from the frozen or chilled state [1987, p.1283-1288, eng] 41-4161
- Prokofeva, T.A.**  
Transportation in regions of new economic development [1986, 208p., rus] 41-3663
- Prokofeva, V.V.**  
Using byproducts of iron ore concentration in construction materials produced for the North [1986, 176p., rus] 41-2214
- Prokopovich, E.V.**  
Soil cover of the Bilimbaev model forest [1986, p.45-72, rus] 41-2875
- Prokuronov, I.B.**  
Structure of the basic spruce forest in southern taiga [1986, p.6-22, rus] 41-2346
- Proshutinskii, T.O.**  
Improving the method of calculating constituents of the heat balance of the soil surface [1986, p.62-66, eng] 41-3679
- Proshutinskii, A.I.U.**  
Ice conditions during the Mikhail Somov cruise in a Soviet antarctic expedition [1986, p.75-78, rus] 41-4190
- Prospects of the Valmet Shipbuilding Co.**  
Prospects of the Valmet Shipbuilding Co. [1985, p.100-102, rus] 41-1521
- Protection of structures from pressure of moving sea ice. Ice tests performed at the "Kemi I" lighthouse**  
Protection of structures from pressure of moving sea ice. Ice tests performed at the "Kemi I" lighthouse [1985, p.19, rus] 41-1514
- Prowse, T.D.**  
Hydrothermal decay of ice jams [1985, p.272-276, eng] 41-1504
- Prowse, T.D.**  
Ice jam characteristics, Liard-Mackenzie rivers confluence [1986, p.653-665, eng] 41-2476
- Prowse, T.D.**  
Recommendations for site-specific observations of river ice [1985, p.111-125, eng] 41-1489
- Prowse, T.D.**  
Relationship between winter lake cover, radiation receipts and the oxygen deficit in temperate lakes [1986, p.386-403, eng] 41-4536
- Prowse, T.D.**  
Water temperature and heat flux at the base of river ice covers [1987, p.33-50, eng] 41-4214
- Prudnikov, V.K.**  
Using subpermafrost ground water in normalizing the air in the Mir pipe quarry [1985, p.144-145, rus] 41-2772
- Pruppacher, H.R.**  
Wind tunnel investigation of the riming of model ice crystal aggregates [1984, p.151-155, eng] 41-4380
- Pruppacher, H.R.**  
Wind tunnel investigation on the riming of snowflakes. Parts 1 and 2 [1986, p.2392-2417, eng] 41-2360



- Prusa, J.**  
Effects of density change and subcooling on the melting of a solid in a rectangular enclosure [1986, p.1787-1792, eng] 41-3296
- Prusan, P.**  
Experimental evidence for a second-order transformation prior to melting in ammonia, organic compounds and ice I [1986, p.949-961, eng] 41-1864
- Paalomahchikov, V.F.**  
Nonthermal radio-frequency emission from intensely deforming ice covers of natural bodies of water [1984, p.441-448, eng] 41-819
- Psenner, R.**  
Snow chemistry of a glacier in the central eastern Alps (Hintertsfenfer, Tyrol, Austria) [1986, p.1-18, eng] 41-3522
- Puccini, P.M.**  
Laboratory soil testing for design of arctic offshore structures [1986, p.137-149, eng] 41-359
- Puccio, G.S.**  
Expansion joint snowplow deflector [1983, 4 col., eng] 41-1772
- Pakemo, M.N.**  
Stages in the development of spot medallions and origin of the circular fractures on their surface [1987, p.85-89, rus] 41-4170
- Pulkkinen, E.**  
Comparison between the creep and the plastic analysis of ice forces by the FEM [1986, p.421-430, eng] 41-1609
- Pullainen, J.**  
Arctic class hopper dredges [1986, p.988-1000, eng] 41-1142
- Punning, I.A.-M.K.**  
Glacioclimatic conditions in the European Arctic in the Late Holocene [1986, p.149-154, rus] 41-124  
Stratification in an ice core from Vestfonna, Nordaustlandet [1986, p.39-43, eng] 41-1790
- Paolanne, J.**  
Application of natural sludge dewatering at small sewage treatment plants in Finland [1981, p.107-117, eng] 41-392
- Pusch, A.A.**  
Design of tracked firefighting vehicles for the Soviet Arctic [1986, p.649-669, eng] 41-2049
- Pusch, R.**  
Creep of soils [1979, 74p., eng] 41-2230
- Pusch, U.**  
Strength and deformation of lightweight concrete of variable moisture content at very low temperatures [1987, p.3-17, eng] 41-4543
- Pustovolt, G.P.**  
Accounting for variations of permafrost strength in foundation design [1986, p.218-223, rus] 41-2104  
Sagging of thawing clayey grounds of different consistency [1986, p.169-172, rus] 41-2097
- Pylaev, E.L.**  
Forecasting ground temperature during adfreezing of piles [1987, p.73-75, rus] 41-3269
- Pyne, A.R.**  
Sea ice operation: McMurdo Sound-Granite Harbour [1986, p.5-13, eng] 41-2870
- Pyne, S.J.**  
The ice: a journey to Antarctica [1986, 428p., eng] 41-2079
- Pyshchev, N.F.**  
Calculating foundation settlement during freeze-thaw [1985, p.91-93, rus] 41-320
- Pyt, H.**  
Properties of slag concrete [1986, 43p., fin] 41-604
- Pyzhin, A.F.**  
Phytocenotic and ecologic peculiarities of forest types prevailing in different landscapes of central taiga [1985, p.38-45, rus] 41-192
- Qi, Z.**  
Frost damage and its preventive measures of hydraulic structures in the Wujiaqu irrigation area, Xinjiang [1986, p.299-304, chi] 41-1435
- Qian-Ming, L.**  
Ice-ocean modelling in the East Greenland area [1986, p.380-398, eng] 41-1108
- Qu, X.**  
Design for an insulated foundation of culvert and sluice [1986, p.261-266, chi] 41-1427
- Quindassel, D.**  
Large-scale oceanography in Fram Strait during the 1984 Marginal Ice Zone Experiment [1987, p.6719-6728, eng] 41-4232
- Quinn, F.H.**  
Record St. Clair River ice jam of 1984 [1986, p.1182-1194, eng] 41-2114
- Qureshi, Z.H.**  
Stability of vertical thermal buoyancy induced flows in cold pure and saline water [1986, p.1383-1392, eng] 41-565
- Rabaglatti, R.**  
Development of a satellite remote sensing technique for the study of alpine glaciers [1987, p.203-215, eng] 41-2763  
Satellite monitoring of Alpine glacier fluctuations [1985, p.150-155, ita] 41-3183
- Rabbe, A.**  
Analysis of a polar low in the Norwegian Sea, 29 February-1 March 1984 [1986, p.91-103, eng] 41-1801
- Rabinowitz, P.D.**  
High latitude drilling in the ocean drilling program [1986, p.83-106, eng] 41-1092
- Raevskikh, V.M.**  
Forest-tundra and north taiga forests of the Far East [1986, p.18-20, rus] 41-3744
- Rafikov, L.G.**  
Operation of power equipment of gas pipelines in western Siberia [1987, 143p., rus] 41-3687
- Ragan, R.M.**  
Hydraulic engineering [1987, 1162p., eng] 41-4220
- Rahikainen, A.**  
Studies of the mechanical properties of cross-country skis [1986, 24p., eng] 41-3802
- Rahman, M.G.**  
Effect of hydrostatic stress on creep of a frozen sand [1987, p.119-124, eng] 41-2412
- Rai, J.**  
Effect of ions on cloud condensation and ice nucleation [1985, p.343-350, eng] 41-2242
- Raichuk, F.Z.**  
Polymer-concrete supports of power lines [1985, p.41-50, rus] 41-1544
- Rais, P.P.**  
Distribution of stresses and strains in sandy bases of rigid stamps [1985, p.100-103, rus] 41-325
- Raisbeck, G.M.**  
Evidence for two intervals of enhanced Be-10 deposition in antarctic ice during the last glacial period [1987, p.273-277, eng] 41-2891
- Raizer, V.I.U.**  
Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band [1986, p.29-42, eng] 41-2207
- Rajaratnam, N.**  
Oil slicks in ice covered rivers [1985, p.369-379, eng] 41-3471
- Rakita, S.A.**  
Quantitative estimation of changes in physiographic structure of the Upper Kolyma basin induced by industrial activities [1986, p.9-13, rus] 41-4467
- Ral'ko, V.D.**  
Cryogenic deformations in reclaimed lands of the Khanka plain [1986, p.160-162, rus] 41-2251
- Ralston, T.D.**  
Thermal ice drill for profiling thick multiyear ice [1987, p.1-11, eng] 41-4211
- Ramachandran, V.S.**  
Cement science [1984, p.1-53, eng] 41-1031  
Concrete admixtures handbook: properties, science, and technology [1984, 626p., eng] 41-1030
- Ramakha, W.R.**  
Carbonated ice process and product [1983, 10 col., eng] 41-1768  
Process for preparing gasified ice of improved stability [1983, 10 col., eng] 41-1770
- Ramakrishnan, V.**  
Durability of concrete containing cement kiln dust [1987, p.305-321, eng] 41-3696
- Ramamoorthi, A.S.**  
Forecasting snowmelt runoff of Himalayan rivers using NOAA AVHRR imagery since 1980 [1986, p.341-347, eng] 41-3904  
NSRA experience in hydrologic applications of space technology during the last decade [1986, p.283-286, eng] 41-3903
- Ramasamy, P.**  
Ice nucleating behaviour of PbI<sub>2</sub> in the presence of soluble salts [1981, p.1527-1533, eng] 41-2255  
X-ray diffraction and ice nucleation studies of AgI-AgCl solid solutions [1986, p.1005-1009, eng] 41-2467
- Ramazan, F.S.**  
Detectors of icing on overhead power lines [1987, p.49-51, rus] 41-3612
- Rampini, A.**  
Development of a satellite remote sensing technique for the study of alpine glaciers [1987, p.203-215, eng] 41-2763  
Satellite monitoring of Alpine glacier fluctuations [1985, p.150-155, ita] 41-3183
- Ramsay, B.R.**  
Enhancement of NOAA AVHRR digital data for sea ice analysis in an operational environment [1986, p.4-5-508, eng] 41-161
- Ramsay, J.D.F.**  
Neutron scattering of supercooled water in silica gels [1986, p.3447-3459, eng] 41-2479
- Ramsdell, R.O.**  
Nimbus-7 microwave radiometry of ocean surface winds and sea ice [1986, p.961-970, eng] 41-3991
- Rancourt, K.**  
Computer interfacing of meteorological sensors in a severe weather and high RFI environment [1985, p.205-211, eng] 41-1496
- Rancourt, K.L.**  
Icing studies on Mt. Washington: an historical perspective [1985, p.197-204, eng] 41-1495
- Rangno, A.L.**  
Evidence for the production of ice particles in clouds due to aircraft penetrations [1982, p.107-110, eng] 41-8  
Ice particles in marine and continental clouds [1984, p.71-72, eng] 41-4374
- Rango, A.**  
Expert system for snowmelt runoff modeling and forecasting [1986, p.174-180, eng] 41-249  
Interpretation and utilization of areal snow-cover data from satellites [1987, p.166-169, eng] 41-4452  
Need for improved snow-cover monitoring techniques [1986, p.173-179, eng] 41-3895
- Ransom, J.A.N.**  
Ice and ice management on the Grand Bank [1986, p.561-582, eng] 41-167
- Ranson, K.J.**  
Sun angle, view angle, and background effects on spectral response of simulated balsam fir canopies [1986, p.649-658, eng] 41-2739
- Rapin, F.**  
Hout Nègre avalanche of Jan. 31, 1986 at Barèges and Sers [1987, p.25-34, fre] 41-3419
- Rapley, C.G.**  
Analysis and simulation of altimeter performance for the production of ice sheet topographic maps [1986, p.141-145, eng] 41-737
- Rapp, A.**  
Nivation and local glaciation in N. and S. Sweden. A progress report [1986, p.197-205, eng] 41-1878
- Rappaport, M.L.**  
Sputtering of water ice at 30-140 K by 0.5-6.0 keV H(+) and Ne(+) ions [1985, p.287-299, eng] 41-1708
- Räsänen, E.**  
Supplies of arctic offshore steels from the point of view of a steel works [1986, p.952-969, eng] 41-1140
- Rascher, C.M.**  
Concentration and flux of solutes from snow and forest floor during snowmelt in the West-Central Adirondack region of New York [1987, p.209-224, eng] 41-3404
- Rashkin, A.V.**  
Determining optimal parameters of thermal protection for dredging grounds [1986, p.214-217, rus] 41-2181
- Rasmussen, E.**  
Different types of polar lows affecting Scandinavia [1986, p.17-29, eng] 41-1797
- Rasmussen, E.B.**  
Ice-ocean modelling in the East Greenland area [1986, p.380-398, eng] 41-1108
- Rasmussen, L.A.**  
Bed topography inferred from airborne radio-echo sounding of Columbia Glacier, Alaska [1986, 26p., eng] 41-2119  
Estimating atmospheric refraction over Columbia Glacier [1986, p.61-72, eng] 41-3526  
Refraction correction for radio echo-sounding of ice overlain by firn [1986, p.192-194, eng] 41-678  
Using sequential photography to estimate ice velocity at the terminus of Columbia Glacier, Alaska [1986, p.117-123, eng] 41-752
- Rasmussen, R.M.**  
Theoretical and wind tunnel study of the melting behavior of small and large spherical ice particles [1982, p.388-391, eng] 41-42  
Wind tunnel investigation of the riming of model ice crystal aggregates [1984, p.151-155, eng] 41-4380  
Wind tunnel investigation on the riming of snowflakes, Parts 1 and 2 [1986, p.2392-2417, eng] 41-2360
- Rasmussen, R.W.**  
Instrument for measuring building-envelope thermal resistance [1986, p.723-738, eng] 41-1386
- Raspopin, G.A.**  
Ice movement velocity at localized water-level drops above spillway outlets [1986, p.71-74, rus] 41-1395
- Rastogi, R.P.**  
Thermodynamic theories of precipitation, dissolution, freezing and melting potentials [1986, p.179-185, eng] 41-530
- Rastorguev, G.A.**  
Optimal distances for transporting modular construction objects to petroleum regions of western Siberia [1986, p.19-20, rus] 41-1527  
Ultimate masses of large-size blocks transported by draw-plates and pneumatic rollers [1986, p.13-14, rus] 41-2780
- Ratinov, V.B.**  
Antifreezing admixtures [1984, p.430-479, eng] 41-1032
- Ratley, C.W.**  
Field evidence of summer convective processes on the Texas South Plains [1982, p.354-357, eng] 41-33
- Ratsek, I.V.**  
Calculating mean altitude of firn lines for groups of mountain glaciers [1986, p.64-68, rus] 41-1639  
Changes in glacial runoff of Central Asian rivers in relation to possible climatic variations [1986, p.59-70, rus] 41-776

- Rauber, R.M.**  
Budget analysis of liquid water, vapor and ice during a mid-December Colorado orographic cloud system [1982, p.572-575, eng] 41-70  
Characteristics of cloud ice and precipitation during winter storms over the mountains of northern Colorado [1987, p.488-524, eng] 41-3761  
Continuous spatial and temporal variations of supercooled water during wintertime mountain storms using a passive microwave radiometer [1984, p.47-50, eng] 41-4371  
Inventory of ice crystal concentrations in a series of stable orographic cloud systems [1982, p.584-587, eng] 41-71
- Microphysical growth processes during a rapidly evolving orographic cloud system [1982, p.481-484, eng] 41-62**
- Numerical simulation of the effects of small scale topographical variations on the generation of aggregate snowflakes [1984, p.613-616, eng] 41-4409**
- Numerical simulation of the effects of varying ice crystal nucleation rates and aggregation processes on orographic snowfall [1986, p.1658-1680, eng] 41-2500**
- Spatial and temporal variations of cloud liquid water determined by aircraft and microwave radiometer measurements in northern Colorado orographic storms [1982, p.477-480, eng] 41-61**
- Rauw, C.I.**  
Conceptual oil dispersion modeling, lower Cook Inlet-Shelikof Strait [1984, p.389-469, eng] 41-1783
- Raverdy, M.**  
Carbonation of concrete with low-calcium fly ash and granulated blast furnace slag: influence of air-entraining agents and freezing-and-thawing cycles [1986, p.541-562, eng] 41-1153
- Raymond, C.**  
Discharges of turbid water during mini-surges of Variegated Glacier, Alaska, U.S.A. [1986, p.195-207, eng] 41-679
- Raymond, C.F.**  
Propagating strain anomalies during mini-surges of Variegated Glacier, Alaska, U.S.A. [1986, p.178-191, eng] 41-677  
Short period motion events on Variegated Glacier as observed by automatic photography and seismic methods [1986, p.82-89, eng] 41-744
- Razgovorova, E.L.**  
Changes in physical and mechanical properties of frozen ground used as construction material [1986, p.30-34, rus] 41-3443
- Razumov, S.V.**  
Design model of a percussion machine for soil compaction [1986, p.103-107, rus] 41-1394
- Razumov, V.V.**  
Seasonal variations of temperature conditions in subalpine soils in the Elbrus Mountain area [1985, p.90-102, rus] 41-848
- Razzhiva, V.IU.**  
Soil reaction effect on plant distribution in nival communities in southeastern Chukotskiy Peninsula [1986, p.1088-1097, rus] 41-1456
- Reavie, D.M.**  
Temporal and spatial character of newly formed ice gouges in eastern Harrison Bay, Alaska, 1977-1982 [1986, 52p., eng] 41-4107
- Rebristala, O.V.**  
Liverwort mosses of the Matuiyakh river (Yamal Peninsula) [1986, p.642-649, rus] 41-2561
- Rebristyl, B.N.**  
Dust control on quarry roads at subzero temperatures [1985, p.135-136, rus] 41-2771
- Rechitski, V.I.**  
Examples of studying landslide processes in Canada [1986, p.96-104, rus] 41-2548
- Reckard, M.K.**  
Hot sand for improved traction on icy roads: estimations of costs and benefits [1985, 7p., eng] 41-4000
- Reddy, D.V.**  
Endochronic constitutive modeling of marine fiber reinforced concrete and frozen soil [1985, p.845-856, eng] 41-670
- Reed, K.M.**  
Geologic studies in Alaska by the U.S. Geological Survey during 1985 [1986, 173p., eng] 41-664
- Reed, L.D.**  
Assessment of a small snowmobile for long-distance unsupported travel [1987, p.597-601, eng] 41-3859
- Reed, S.C.**  
Initial assessment of the 600-gallon-per-hour Reverse Osmosis Water Purification Unit. Field water supply on the winter battlefield [1986, 6p., eng] 41-529  
Nitrogen control in wastewater treatment systems for military facilities in cold regions [1986, 23p., eng] 41-859  
Problems and opportunities with winter wastewater treatment [1986, p.16-20, eng] 41-2965  
Treatment and disposal of alum and other metallic hydroxide sludges [1987, 40p. + plates, eng] 41-4142
- Reeh, N.**  
Greenland ice-sheet margin—a mine of ice for paleo-environmental studies [1987, p.229-234, eng] 41-3794
- Model for simulating the variation in the oxygen isotope ratio in the meltwater discharge from the marginal zone of the ice cap at Pákitup akuliaruserua, Jakobshavn [1986, 34p., dan] 41-3938**
- Objective reconstructions of the late Wisconsinan Laurentide ice sheet and the significance of deformable beds [1985, p.229-238, eng] 41-2760**
- Velocity measurements on Dagaard-Jensen Glacier, Scoresbysund, East Greenland [1986, p.146-150, eng] 41-758**
- Refsdal, G.**  
Plastic foam—from frost protection to road embankments [1985, p.16-19, eng] 41-335
- Regina, M.J.**  
Ice breaker [1982, 2 col., eng] 41-1994
- Regional'naia konferentsiia "Effektivnye fundamentei maloetazhnykh zdani na puchalistskykh gruntakh v raiionakh Dal'nego Vostoka i Zabaikal'sa", Chita, Nov. 21-22, 1985**  
Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985) [1985, 119p., rus] 41-276
- Regourd, M.**  
Durability of an arctic concrete [1987, p.919-933, eng] 41-3713  
Effects of freeze-thaw cycles on the microstructure of hydration products [1986, p.1-19, eng] 41-4141
- Rehfeldt, G.E.**  
Development and verification of models of freezing tolerance for Douglas-fir populations in the inland Northwest [1986, 5p., eng] 41-2185
- Rehwal, W.**  
Contamination of firn layers by radioactive fission products from atmospheric fallout [1986, p.1173-1176, eng] 41-4360
- Reid, L.M.**  
Effects of freezing on nitrite stability in aqueous solutions [1987, p.22-23, eng] 41-2808
- Reimnitz, E.**  
Anchor ice and bottom-freezing in high-latitude marine sedimentary environments: observations from the Alaskan Beaufort Sea [1986, 21p., eng] 41-1209  
Beaufort Sea coastal currents: a divergence near Barter Island, Alaska? [1987, p.139-142, eng] 41-3468  
Field observations on slush ice generated during freezeup in Arctic coastal waters [1986, 19p., eng] 41-1211  
Flume studies and field observations of the interaction of frazil ice and anchor ice with sediment [1986, 48p., eng] 41-1210  
Ice-gouge studies, Alaskan Beaufort Sea [1986, p.41-50, eng] 41-3090  
Monitoring seasonal changes in seafloor temperature and salinity [1986, p.110-114, eng] 41-369  
Thirty-four-year shoreface evolution at a rapidly retreating Arctic coastal site [1987, p.161-164, eng] 41-3469
- Reinauer, G.A.**  
Marine gas turbine inlet de-icing [1986, p.457-461, eng] 41-949
- Reinhardt, W.**  
Determination of changes in volume and elevation of glaciers, using digital elevation models for the Vernagtferner, Ötztal Alps, Austria [1986, p.151-155, eng] 41-759
- Reinking, R.F.**  
Graupel characteristics in relation to the dynamics of Florida cumuli [1982, p.362-365, eng] 41-35  
Vertical continuity of microphysical processes and updrafts in supercooled portions of Florida cumuli [1982, p.370-373, eng] 41-37
- Reinwarth, O.**  
Combined ice and water balance investigations at the Vernagtferner glacier, Ötztal Alps [1986, p.116-120, 233-236, eng] 41-1065  
Modeling runoff from Vernagtferner glacier, the Ötztal Alps, Austria [1986, p.65-69, 178-182, rus] 41-4342
- Reish, A.K.**  
Integrated mechanization of earthwork [1987, 335p. (Pertinent p.284-318), rus] 41-3674
- Reiter, P.H.**  
Field data for the numerical modeling of winter conditions and computerized testing of field data [1986, p.305-317, eng] 41-539
- Reitsch, H.**  
Determination of changes in volume and elevation of glaciers, using digital elevation models for the Vernagtferner, Ötztal Alps, Austria [1986, p.151-155, eng] 41-759
- Research**  
Research [1986, p.31-32, eng] 41-568  
Research and development looking hard at ice-going propulsion and passenger ships  
Research and development looking hard at ice-going propulsion and passenger ships [1986, p.7-8, eng] 41-2964  
Research Group of Tamanoki Landslide Disaster in Omi-machi, Niigata Prefecture  
Studies on the Tamanoki landslide disaster which occurred in Omi-machi, Niigata Prefecture, 1985 [1985, p.73-92, jpn] 41-4585
- Reshetnikov, A.D.**  
Classification of means of ballasting and fastening pipelines [1986, p.20-21, rus] 41-2782
- Reshetov, E.A.**  
Contemporary methods in antarctic cartography [1986, p.23-25, rus] 41-3533
- Reshew, J.W.**  
Arctic environment [1986, p.83-100, eng] 41-926
- Respublikanskaya nauchno-metodicheskaya konferentsiya vysshikh uchebnykh zavedenii Gruzinskoi SSR po obrazovaniiu v oblasti okhrany okruzhaiushchei sredy, Ist. Tbilisi, June 26-28, 1980**  
Problems of ecology and environmental protection (Collections of papers of the First Republican Conference), Vol.1 [1983, 292p., rus] 41-519
- Resta, J.**  
Treatment and disposal of alum and other metallic hydroxide sludges [1987, 40p. + plates, eng] 41-4142
- Retha, R.J.**  
Field experience with pulse-jet self-cleaning air filtration on gas turbines in an Arctic environment [1987, p.79-84, eng] 41-2768
- Reviakina, V.S.**  
Glacier dynamics of the Altai-Sayan Mountain System for the last 150 years [1986, p.95-99, 214-216, eng] 41-1060
- Revill, C.R.**  
Future icebreaker design [1986, p.169-200, eng] 41-2027
- Rey, L.**  
Traumatological effects of meteorological conditions; the case of skiing accidents [1987, p.15-24, fre] 41-3418
- Reynaud, L.**  
Glacier mass balance reconstructions for the Northern Hemisphere covering this century and their climatic significance [1986, p.20-25, 153-157, eng] 41-1049  
Mass-balance measurements: problems and two new methods of determining variations [1986, p.446-454, eng] 41-4300  
November 1986 survey of the Grand Moulin on the Mer de Glace, Mont Blanc Massif, France [1987, p.130-131, eng] 41-3606
- Reynolds, D.N.**  
Influence of water table and atmospheric CO<sub>2</sub> concentration on the carbon balance of arctic tundra [1984, p.331-335, eng] 41-1234
- Rezanov, I.N.**  
Rational utilization and preservation of ground water in the Buryat ASSR [1986, 114p., rus] 41-3330
- Riabchuk, V.K.**  
Characteristics of granulometric composition of Late Pleistocene deposits in the Ledovyy Obyrv outcrop [1986, p.200-206, rus] 41-2841
- Riabchuk, V.K.**  
Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka) [1986, p.114-120, rus] 41-2091
- Riabets, N.I.**  
Improving the ultra-high frequency technique of groove-sampling in northern mines [1986, p.10-15, rus] 41-4549
- Riaboshapko, A.G.**  
Variation of sulfate content in Arctic atmospheric precipitation during the last 90 years [1986, p.38-42, eng] 41-1690
- Riabova, L.M.**  
Quantitative estimation of changes in physiographic structure of the Upper Kolyma basin induced by industrial activities [1986, p.9-13, rus] 41-4467
- Richards, D.L.**  
Field observations of flow patterns generated by an ice keel in stratified flow [1986, p.328-349, eng] 41-154
- Richards, K.S.**  
Slope stability; geotechnical engineering and geomorphology [1987, 648p., eng] 41-3042
- Richmond, W.R.**  
Study of heat loss through basement floors [1986, p.336-350, eng] 41-1381
- Richter-Menge, J.A.**  
Comparison of the compressive behavior of naturally and laboratory-grown saline ice [1986, p.331-350, eng] 41-2664  
Confined compressive strength of horizontal first-year sea ice samples [1987, p.197-207, eng] 41-2422  
Evaluation of the rheological properties of columnar ridge sea ice [1986, p.55-66, eng] 41-1582  
Mechanical properties of multi-year sea ice. Phase 1: Ice structure analysis [1987, 30p., eng] 41-4143  
Triaxial testing of first-year sea ice [1986, 41p., eng] 41-2547
- Rickman, H.**  
Amorphous-crystalline phase transition and the light curve of comet P/Halley [1985, p.419-428, eng] 41-1716
- Ridley, R.C.**  
Effect of salt application on roadway safety and mobility [1986, 90p., eng] 41-1413
- Riechers, G.H.**  
Impacts of increasing CO<sub>2</sub> on natural vegetation, particularly the tundra [1986, p.36-42, eng] 41-2217
- Rinehart, V.**  
Progress in developing new design guidelines for ice transiting ships [1986, p.537-552, eng] 41-1617  
Review of research on polar class icebreakers to develop arctic ship design guidelines [1986, p.19-40, eng] 41-2022

- Ring, W.F.**  
Measurement of sea and ice backscatter reflectivity using an OTH radar system [1982, 15p., eng] 41-1758
- Riska, K.**  
Current problems in arctic vessel research [1986, p.41-65, eng] 41-2023
- Rissel, M.C.**  
Staffing of maintenance crews during winter months [1985, p.12-21, eng] 41-656
- Rising, J.M.**  
Particle size and clay mineral distributions within sorted and nonsorted circles and the surrounding parent material, Niwot Ridge, Front Range, Colorado, U.S.A. [1985, p.153-163, eng] 41-1226
- Rist, S.**  
Glacier variations in 1964/65-1973/74 (10 years), 1974/75-1981/82 (8 years) and 1982/83 [1984, p.173-179, ice] 41-810  
Report of jökulhlaups in 1981, 1982 and 1983 [1984, p.165-172, ice] 41-809
- Rivière, P.**  
Experimental investigation of melting of unfixed ice in an isothermal horizontal cylinder [1987, p.155-165, eng] 41-2881
- Rivkin, F.M.**  
Naleds of the northern Yenisey River area [1986, p.132-138, rus] 41-2830
- Rivkin, R.B.**  
Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses [1985, p.146-147, eng] 41-2960  
Photoadaptations of photosynthesis and carbon metabolism by phytoplankton from McMurdo Sound, Antarctica. 1. Species-specific and community responses to reduced irradiances [1987, p.249-259, eng] 41-2504
- Rjörkestam, H.**  
Hydrodynamic loads developed during ice-clogging of a propeller nozzle and means to prevent the clogging [1986, p.1061-1092, eng] 41-1146
- Roach, A.T.**  
Northward flow in the Bering and Chukchi seas [1987, p.7097-7105, eng] 41-4264
- Robe, R.Q.**  
Modeling winds and open-water buoy drift along the eastern Beaufort Sea coast, including the effects of the Brooks Range [1986, p.13,011-13,032, eng] 41-1860
- Roberge, J.**  
Integrated model of snowmelt quality for boreal forest sites [1985, p.69-83, eng] 41-1486
- Roberts, A.T.**  
Observations of chlorophylls in high arctic sea ice in winter [1984, p.148-152, eng] 41-1956
- Roberts, J.**  
Freeze protection and temperature maintenance of ships, shipborne equipment and electronic systems [1986, p.500-542, eng] 41-954
- Robertson, L.G.**  
Snow avalanche atlas, Seward Highway, south-central Alaska [1982, 168p., eng] 41-560
- Robertson, W.D.**  
Selection of paving asphalt cements for low temperature service [1987, p.41-82, eng] 41-4021
- Robinson, D.A.**  
Anthropogenic impact on winter surface albedo [1985, 398p., eng] 41-2582  
Snow melt and surface albedo in the Arctic Basin [1986, p.945-948, eng] 41-1215
- Robinson, W.H.**  
Alignment of crystals in sea ice due to fluid motion [1986, p.197-214, eng] 41-1289  
*In situ* measurements of the resistivity of antarctic sea ice [1986, p.285-290, eng] 41-1295
- Robock, A.**  
Comparison of Northern Hemisphere snow cover data sets [1987, p.53-68, eng] 41-3341
- Robson, G.**  
Durability of high-strength concrete containing a high range water reducer [1987, p.765-780, eng] 41-3705
- Robson, W.**  
Experimental use of dispersants for spill countermeasures on arctic beaches [1984, p.324-337, eng] 41-895
- Rochet, M.**  
Nutrient limitation of the bottom-ice microalga biomass (southeastern Hudson Bay, Canadian Arctic) [1986, p.969-982, eng] 41-1473  
Sea-ice microalgae to test the hypothesis of photosynthetic adaptation to high frequency light fluctuations [1986, p.321-326, eng] 41-1554
- Rodgers, G.G.**  
Ice accretion on cables of various cross-sections [1986, p.11-28, eng] 41-3796
- Rodhe, L.**  
Pingos and palsas in northernmost Sweden—preliminary notes on recent investigations [1986, p.149-154, eng] 41-1873
- Rodi, A.R.**  
Case studies of ice and supercooled water evolution in SCPP-1 convective clouds [1982, p.465-468, eng] 41-58
- Rodin, V.N.**  
Water supply and sewage disposal in the Yamal Peninsula [1987, p.8-9, rus] 41-3935
- Rodionov, V.S.**  
Splitting of phospholipids and change in the ultrastructure of pine needle cells after freezing [1985, p.934-939, rus] 41-1827
- Roe, P.G.**  
Winter air temperatures in relation to frost damage in roads [1986, 15p., eng] 41-2934
- Roecks, D.**  
Offshore anti-icing, field results and approval considerations [1986, p.471-483, eng] 41-1113
- Roether, W.**  
Helium-3 balance of the upper layers of the northwest Weddell Sea [1987, p.365-377, eng] 41-4602
- Rogalski, R.**  
Ship icing experiment: a means for identifying and solving cold weather operational problems [1986, p.379-406, eng] 41-942
- Rogers, C.**  
Destruction of concrete water tanks in a severe climate due to ice lensing [1987, p.723-739, eng] 41-3703
- Rogers, D.C.**  
Ice crystal and ice nucleus measurements in cap clouds [1982, p.333-334, eng] 41-27  
Measurements of natural ice nuclei with a continuous flow diffusion chamber [1982, p.115-118, eng] 41-10
- Rogerson, R.J.**  
Acoustic survey and glacial history of Adams Lake, outer Nachvak Fiord, northern Labrador [1987, p.101-110, eng] 41-4011  
Five-year growth of rock lichens in a low-Arctic mountain environment, northern Labrador [1986, p.85-91, eng] 41-2707  
Mass balance of four cirque glaciers in the Torngat Mountains of Northern Labrador, Canada [1986, p.41-680, eng] 41-680  
Medial moraines and surface melt on glaciers of the Torngat Mountains, northern Labrador, Canada [1986, p.350-354, eng] 41-4287
- Roggensack, B.**  
Engineering applications and risk assessment: summary and discussion [1986, p.31-37, eng] 41-3089
- Roggensack, W.**  
Seabed response to ice forces: summary and discussion [1986, p.148-153, eng] 41-3105
- Rogov, V.V.**  
Role of gas-liquid inclusions in the mechanism of cryogenic disintegration of quartz [1987, p.81-85, rus] 41-4169
- Rogovtsev, P.N.**  
Formation of a microscopic ice filament in an electric field [1985, p.619-620, eng] 41-2330
- Rohardt, G.**  
Helium-3 balance of the upper layers of the northwest Weddell Sea [1987, p.365-377, eng] 41-4602
- Rolák, G.S.**  
Polymer-concrete supports of power lines [1985, p.41-50, rus] 41-1544  
State of corrugated metal culverts during operation [1986, p.12-13, rus] 41-1531
- Roine, M.**  
Maintenance measures and road safety [1983, p.262-266, fin] 41-1934
- Roltsau, M.**  
Crack sealing: an evaluation of a few compounds and of a variety of application conditions [1987, p.689-718, eng] 41-4040
- Rojansky, M.**  
Towards an actual probabilistic approach in predicting offshore structures behaviour in arctic regions [1985, p.705-716, eng] 41-669
- Roland, N.W.**  
Availability of mineral resources in the Antarctic [1986, p.154-163, ger] 41-2921
- Romagnoli, R.**  
Computer modelling of the behaviour of ice fractured zones induced by Arctic offshore operations [1986, p.399-408, eng] 41-1109
- Roman, L.T.**  
Developing and standardizing methods of determining the structural properties of frozen grounds [1983, p.19-21, rus] 41-4482
- Romanov, A.A.**  
Basic regularities of the ice process development in the southern ocean [1986, p.28-35, rus] 41-4193
- Romanov, N.N.**  
Problems of satellite meteorology and remote sensing [1986, 104p., rus] 41-1684
- Romanov, V.**  
Under severe climatic conditions. Special characteristics and problems of the construction of the Novosibirsk subway [1986, p.7-9, rus] 41-3738
- Romanov, V.F.**  
Meso- and macroscale air-sea interaction processes in the South Atlantic Ocean [1986, p.62-67, rus] 41-4188
- Romanov, V.V.**  
Using tritium in studying ground ice [1986, p.98-100, rus] 41-113
- Romanovskii, N.N.**  
Glaciers, subglacial taliks and perennially frozen rocks [1986, p.206-219, rus] 41-2842  
Influence of ground temperature upon the development of ice wedge polygon formations [1972, p.33-41, rus] 41-3747  
Interaction between cryolithozone and natural gases of the underground hydrosphere [1986, p.3-17, rus] 41-2543
- Romanovskii, V.E.**  
Climatic fluctuations and the peculiarities of Holocene permafrost development in the USSR [1986, p.45-58, rus] 41-2085
- Romasheva, P.I.**  
Nitrogen cryostat for study of Moessbauer scattering [1987, p.981-983, eng] 41-3160
- Rooney, S.T.**  
Continuation of glaciogeophysical survey of the interior Ross Embayment: summary of 1984-1985 field work [1985, p.63-64, eng] 41-2626  
Deformation of till beneath ice stream B, West Antarctica [1986, p.57-59, eng] 41-1780  
Seismic measurements reveal a saturated porous layer beneath an active antarctic ice stream [1986, p.54-57, eng] 41-1779
- Roots, T.**  
Model studies of ice interaction with ship rudders and steering systems [1986, 2 vols., eng] 41-3372  
Summary of the results of the Canadian participation in the Polar Class trafficability program, 1981-1985 [1986, 63p., eng] 41-3028
- Ropelewski, C.F.**  
Satellite derived snow cover in climate diagnostics studies [1984, p.245-248, eng] 41-2590
- Rose, N.M.**  
Geologic field studies of the Miki Fjord area, East Greenland [1985, p.219-235, eng] 41-872
- Rosen, D.I.**  
Investigations of active infrared detection of pavement icing [1987, 39p., eng] 41-3763
- Rosing, M.T.**  
Geologic field studies of the Miki Fjord area, East Greenland [1985, p.219-235, eng] 41-872
- Rosinski, J.**  
Nature of ice-forming nuclei in marine air masses [1987, p.291-309, eng] 41-4364
- Roskowski, P.M.**  
Visual cloud histories related to first echo formation in northeast Colorado cumulus [1982, p.342-345, eng] 41-30
- Rosquist, K.**  
AP-1-88 hovercraft in ice operations [1986, p.590-601, eng] 41-2047
- Ross, B.**  
Synoptic-scale influences of snow cover and sea ice [1986, p.1795-1810, eng] 41-988
- Ross, D.**  
Imaging radar directional wave observations and hindcast results for the Norwegian Sea storm of 29 Feb. 1984 [1986, p.285-296, eng] 41-1811
- Ross, H.B.**  
Deposition of atmospheric trace metals in northern Sweden as measured in the snowpack [1986, p.27-43, eng] 41-1260
- Ross, J.F.**  
House for a cold city [1985, p.20-24, eng] 41-336
- Ross, R.G.**  
Effect of guest molecule size on the thermal conductivity and heat capacity of clathrate hydrates [1983, p.1423-1432, eng] 41-2246
- Rostådy, F.S.**  
Strength and deformation of lightweight concrete of variable moisture content at very low temperatures [1987, p.3-17, eng] 41-4543
- Rothrock, D.A.**  
Extracting sea ice data from satellite SAR imagery [1986, p.849-854, eng] 41-2299  
Ice thickness distribution—measurement and theory [1986, p.551-575, eng] 41-2994  
Photogrammetric observations of the lateral melt of sea ice floes [1987, p.7045-7048, eng] 41-4259
- Rototsev, K.P.**  
Diagnostics, statistical analysis and classification of instabilities in glacier dynamics [1986, p.92-96, 205-209, rus] 41-4348
- Rototseva, O.V.**  
Recent fluctuations of mountain glaciers in the Northern Hemisphere [1986, p.25-33, 157-163, eng] 41-1050
- Rott, H.**  
Possibilities and limits of synthetic aperture radar for snow and glacier surveying [1987, p.195-199, eng] 41-4457  
Prospects of microwave remote sensing for snow hydrology [1986, p.215-223, eng] 41-3900
- Roulet, N.T.**  
Hydrology of a wetland in the continuous permafrost region [1986, p.73-91, eng] 41-2700  
Spectral distribution of light under a subarctic winter lake cover [1986, p.89-95, eng] 41-484

- Rouse, W.R.  
Examples of enhanced global solar radiation through multiple reflection from an ice-covered arctic sea [1987, p.670-674, eng] 41-4209
- Royet, J.P.  
Laboratory simulations of graupel growth [1984, p.163-166, eng] 41-4382
- Row, D.G.  
Limit state probabilistic design of offshore Arctic pipelines [1987, p.115-123, eng] 41-4632
- Rowan, D.E.  
Glacial and periglacial geology of Spitsbergen, Svalbard [1981, 115p., eng] 41-3892
- Rowe, J.  
Observation of a model-scale semisubmersible in pack ice [1987, p.341-350, eng] 41-2441
- Roy, S.K.  
Melting process within spherical enclosures [1987, p.460-462, eng] 41-3757
- Royen, E. van  
Extended lattice model of water; two-sublattice, two-orientation model [1982, p.124-142, eng] 41-2245
- Rozdobud'ko, N.K.  
Transportation in regions of new economic development [1986, 208p., rus] 41-3663
- Rozenberg, T.I.  
Antifreezing admixtures [1984, p.430-479, eng] 41-1032
- RR-3090—a drilling and production platform for the Arctic  
RR-3090—a drilling and production platform for the Arctic [1986, p.8, eng] 41-85
- Rubinshtein, A.I.A.  
Organic soils [1986, 89p., rus] 41-2729
- Rubinshtein, I.G.  
Nimbus-7 microwave radiometry of ocean surface winds and sea ice [1986, p.961-970, eng] 41-3991
- Rublev, V.A.  
Thermally insulated pipes for construction of industrial over-ground engineering nets [1986, p.28-29, rus] 41-2781
- Rubtsov, M.V.  
Forest effect on snow reserves and melting in the central taiga of northern Europe [1986, p.11-16, rus] 41-2598
- Rudberg, S.  
Present-day geomorphological processes on Prins Oscars Land, Svalbard [1986, p.41-63, eng] 41-1845
- Rude, B.J.  
Optimization of the winter service in Rheinland-Pfalz [1985, p.41-46, ger] 41-389
- Rudels, B.  
On the mass balance of the Polar Ocean, with special emphasis on the Fram Strait [1987, 53p., eng] 41-4599
- Rudenski, S.I.  
Integrated mechanization of earthwork [1987, 335p. (Pertinent p.284-318), rus] 41-3674
- Rudnev, A.V.  
Glacier ice in Quaternary deposits of the Malyk-Siyenskaya basin [1984, p.107-116, rus] 41-1911
- Rudnev, N.I.  
Structure of the radiation and heat balance in Kologriv forest [1986, p.72-87, rus] 41-2348
- Rudolfsson, A.  
Themes of the congress [1986, p.49-77, eng] 41-2488
- Rudykh, L.N.  
Studying temperature regime of floor surfaces in residential buildings on slab foundations [1985, p.113-114, rus] 41-333
- Rudykh, O.L.  
Studying temperature regime of floor surfaces in residential buildings on slab foundations [1985, p.113-114, rus] 41-333
- Ruessens, J.  
Supralittoral, freshwater and terrestrial algal vegetation of Bouvetöya [1986, p.65-69, eng] 41-922
- Ruf, C.  
Microwave radiometer weather-correcting sea ice algorithm [1987, p.6521-6534, eng] 41-3643
- Ruffell, J.P.  
Drilling and sampling offshore permafrost [1986, p.11-15, eng] 41-2509
- Ruggiero, F.H.  
Airborne measurements of the antarctic cloud water acidity [1985, p.201-203, eng] 41-3323
- Ruggles, R.W.  
Field investigation of St. Lawrence River hanging ice dams, winter of 1983-84 [1984, 85p., eng] 41-1669
- Winter flow, ice and weather conditions of the upper St. Lawrence River, 1971-81. Volume I: Ice cover charts (Part B) [1982, p.249-505, eng] 41-174
- Rules for the classification and construction of sea-going ships  
Rules for the classification and construction of sea-going ships [1986, 680p., eng] 41-1682
- Rumer, R.R., Jr.  
Niagara River ice boom: effects on environment [1983, p.105-116, eng] 41-3573
- Rumyantseva, N.A.  
Cyclic swelling of clays [1987, p.23-36, rus] 41-3399
- Ronich, A.V.  
Determining dynamic properties of avalanches on the basis of simple field information [1986, p.169-171, rus] 41-1663
- Time of snow relaxation [1985, p.3-7, rus] 41-837
- Ruohomäki, J.  
Frost resistance and accelerated hardening of concrete with blended slag binder [1986, 35p. + append., fin] 41-2523
- Properties of slag concrete [1986, 43p., fin] 41-604
- Ruosteenoja, K.  
Date of break-up of lake ice as a climate index [1986, p.89-99, eng] 41-3758
- Rusanov, V.P.  
Basic components of chemical balance of the Arctic Ocean [1986, p.40-51, rus] 41-4195
- Preliminary results of microbiological investigations at Mirny [1986, p.133-136, rus] 41-1270
- Rusanova, G.V.  
Micromorphological characteristics of humus profile in loamy taiga soils [1986, p.69-77, rus] 41-4564
- Russell-Head, D.S.  
Casey snow runway data report, 1983-84 [1984, 98p., eng] 41-4526
- Casey snow runway meteorological records, 1984 [1987, 98p., eng] 41-4528
- Casey snow runway tests, 1983-84 [1984, 111p., eng] 41-4527
- Russell, S.O.  
Concentration of impurities during melting of snow made from secondary sewage effluent [1986, p.151-156, eng] 41-351
- Russia. Gosudarstvennyi komitet po delam stroitel'stva. Nauchno-issledovatel'skii institut osnovanii i podzemnykh sooruzhenii  
Guide to chemical stabilization of soils by injection, in industrial and civil engineering (Supplement to construction norms and regulations SNiP 3.02.01-83) [1986, 129p., rus] 41-3608
- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83) [1986, 567p., rus] 41-2968
- Russia. Gosudarstvennyi komitet standartov  
State standards index of the USSR, 1985 [1985, 5 vols., rus] 41-2481
- State standards index of the USSR, 1986 [1986, 4 vols., rus] 41-2482
- Ruszczynska-Szenajch, H.  
Origin of glacial raft: detachment, transport, deposition [1987, p.101-112, eng] 41-4100
- Ruth, B.E.  
Evaluation and prevention of water damage to asphalt pavement materials [1985, 154p., eng] 41-3332
- Factors affecting the cracking of asphalt concrete pavements [1986, p.96-109, eng] 41-2202
- Rutner, I.A.F.  
Inverse Stefan problem in casting multicomponent alloys [1986, p.1479-1483, eng] 41-1852
- Ruvinski, V.I.  
Waterproofing interlayers for the improvement of water- and thermal regime of roadbeds [1985, p.23-24, rus] 41-502
- Ryan, J.P.  
Further studies on the assessment of marine radars for the detection of icebergs [1986, 82p., eng] 41-272
- Radar digitization, conversion and analysis of an ice hazard detection/collision avoidance system [1984, 17p., eng] 41-605
- Rybakov, A.P.  
Mechanized laying of communication cables under difficult conditions [1987, 161p., rus] 41-3609
- Rybakova, N.O.  
Climate of the vegetational period during the formation of "ice-complex" deposits of the Omolon River [1987, p.113-119, rus] 41-3771
- Rychetsnik, J.  
Avalanches in an avalanche starting zone with and without snow fences and forestation [1985, p.197-208, ger] 41-716
- Rychaovskiy, R.  
Ice penetrator scale model and full scale test results [1986, p.385-414, eng] 41-2667
- Rychaovskiy, R.E.  
Thick ice penetrator [1986, p.495-520, eng] 41-2674
- Rydén, B.E.  
Winter soil moisture regime monitored by the Time Domain Reflectometry technique (TDR) [1986, p.175-184, eng] 41-1876
- Ryder, J.M.  
Neoglaciation in the southern Coast Mountains of British Columbia: chronology prior to the late Neoglaciation maximum [1986, p.273-287, eng] 41-1928
- Ryerson, C.C.  
Rime meteorology in the Green Mountains [1987, 46p., eng] 41-3144
- Ryl'skii, V.A.  
Basic problems of power supply in the North [1986, p.86-93, rus] 41-1205
- Ryokai, K.  
In situ frost heaving test based on the segregation potential concept [1986, p.99-107, jpn] 41-3883
- Rzheplinskii, D.G.  
Using satellite data for calculating ocean-atmosphere heat transfer in the Newfoundland energy-active oceanic zone in winter [1986, p.32-41, rus] 41-1540
- Rzhevskii, V.A.  
Blasting-mechanical method of excavating frozen ground [1986, p.16-18, rus] 41-526
- S.L. Ross Environmental Research, Ltd.  
Field research spills to investigate the physical and chemical fate of oil in pack ice [1987, 95p. + append., eng] 41-3074
- Testing of an oil recovery concept for use in brash and mulched ice [1986, 43p., eng] 41-269
- Sanda, A.S.  
Laboratory soil testing for design of arctic offshore structures [1986, p.137-149, eng] 41-359
- Saari, M.R.  
Climatic warming and basal melting of large ice sheets: possible complications for East Antarctica [1987, p.33-36, eng] 41-2947
- Explosive growth of shear-heating instabilities in the down-slope creep of ice sheets [1986, p.314-320, eng] 41-4282
- Shear heating instabilities of large ice sheets [1985, p.74-75, eng] 41-2634
- Saarikangas, M.  
Operational experience with the new-type Baltic icebreaker "Otso" [1986, p.1039-1060, eng] 41-1145
- Saarikivi, P.  
Radar observations of snow bands in Finland [1982, p.461-464, eng] 41-57
- Sack, R.L.  
Automated data acquisition for structural snow loads [1984, p.26-36, eng] 41-1944
- Ground snow loads for Idaho [1984, p.59-63, eng] 41-1947
- Sloped roof snow loads using simulation [1987, p.1820-1833, eng] 41-4173
- Sack, W.A.  
Potential for use of natural brines in highway applications [1985, p.1-8, eng] 41-654
- Sackinger, W.  
Development of new advanced materials for sub-arctic and arctic offshore structures [1986, p.833-968, eng] 41-1135
- Sackinger, W.M.  
Development of quantitative information on Arctic sea ice and ice island movement, thickness, and mechanical properties: adhesion and physical properties of naturally formed sea spray ice [1986, p.81-89, eng] 41-368
- Development of quantitative information on Arctic sea ice and ice island movement, thickness, and mechanical properties: ice island production and movement [1986, p.63-80, eng] 41-367
- Generation and trajectories of ice islands and multiyear ice flows [1986, p.579-594, eng] 41-1620
- Ice features and movement north of Ellesmere Island, Canada [1987, p.32-43, eng] 41-3371
- Ice islands as locations for arctic data collection [1986, p.493-497, eng] 41-953
- Low adhesion coatings for sea spray ice on offshore drilling units in northern waters [1986, p.512-527, eng] 41-1116
- Modeling of spray ice accretion experiments [1986, p.487-491, eng] 41-952
- Remote sensing of sea-ice growth and melt-pool evolution, Milne Ice Shelf, Ellesmere Island, Canada [1987, p.145-150, eng] 41-4449
- Spray ice bonding to superstructure coatings [1986, p.453-455, eng] 41-948
- Viscoelastic approach to the ice load evaluation [1986, p.407-421, eng] 41-1608
- Sadegh, A.M.  
Boundary integral equation technique with application to freezing around a buried pipe [1987, p.223-232, eng] 41-2981
- Sadorich, M.A.  
Concretes with unsorted sand-gravel mixtures (from experience with the Angara hydroelectric power plant cascade) [1986, p.50-53, rus] 41-1924
- Sadorvskii, A.I.  
Cryogenic factor in the evolution of landscape-geodynamic structures [1986, p.153-165, rus] 41-3496
- Sadorvskii, A.V.  
Developing and standardizing methods of determining the structural properties of frozen grounds [1983, p.19-21, rus] 41-4482
- SAE Committee AGE-2, Civil Aircraft Ground Support Equipment  
Ramp de-icing [1975, 16p., eng] 41-1761
- Sacki, H.  
Experimental study on permeability coefficient of sea ice [1986, p.237-246, eng] 41-1595
- Saetrang, A.C.  
Radio echo-sounding on Jostedalbreen, Norway [1986, p.156-158, eng] 41-760



- Saifullin, M.N.**  
Drilling complex for the Far North [1986, p.30-31, rus] 41-3773
- Safonov, V.F.**  
Scientific basis for the processes of upbuilding frozen water ice foams on ground and their practical application [1986, p.66-72, rus] 41-2155
- Safonov, A.A.**  
Engineering preparations for construction of Surgut State Regional Electric Power Plant No.2 [1987, p.14-17, rus] 41-3808
- Safonov, I.U.V.**  
Calculating tangential frost-heaving forces of ground [1985, p.93-95, rus] 41-321
- Safonova, I.N.**  
Vegetation of Mabel and Guker islands (Franz Josef Land archipelago) [1986, p.51-63, rus] 41-3866
- Saibene, C.**  
Glaciological research: trends and proposals (introduction to the 5th Italian Glaciological Conference) [1985, p.68-72, ita] 41-3175
- Saiga, Y.**  
Low-temperature service facilities and recent status of their materials and welding [1986, p.1-21, eng] 41-3785
- Saito, A.**  
Basic research on the latent heat thermal energy storage utilizing the contact melting phenomena [1986, p.2946-2952, eng] 41-2109  
Direct contact melting heat transfer on a heated surface [1986, p.1805-1810, eng] 41-3299
- Sakai, K.**  
Analysis of ice crystallization in continuous crystallizers based on a particle size-dependent growth rate model [1986, p.2241-2246, eng] 41-1348
- Sakai, M.**  
Development of prefabricated metal buildings for cold environment [1985, p.20-29, eng] 41-1572  
Experimental study on permeability coefficient of sea ice [1986, p.237-246, eng] 41-1595
- Sakakibara, H.**  
Countermeasures against damage by heavy snowfall in Seikan Ship Bureau [1985, p.13-15, jpn] 41-178
- Sakamoto, Y.**  
Under-snow radar using multifrequency holography [1986, p.111-118, eng] 41-853
- Sakata, M.**  
Durability of concrete containing a shrinkage reducing admixture [1987, p.1103-1119, eng] 41-3720
- Salama, M.M.**  
Proceedings [1986, 492p., eng] 41-354
- Salamatin, A.N.**  
Modeling glacier surges and climatically induced fluctuations [1986, p.97-102, 210-214, rus] 41-4349
- Salanon, J.M.**  
Wind studies center in the Croix de Chamrousse (Isère) mountain environment [1986, p.51-54, fre] 41-3357
- Sales, G.S.**  
HF (high frequency) over-the-horizon mapping of the Greenland icecap [1983, p.(11)1-(11)12, eng] 41-3229  
Measurement of sea and ice backscatter reflectivity using an OTH radar system [1982, 15p., eng] 41-1758
- Salkhova, D.Kh.**  
Forecasting wet snow avalanches from meteorological data [1986, p.32-39, rus] 41-773
- Salnikov, F.I.**  
Accounting for the peculiarities of frost-affected soils in Transbaikalia when designing and building bases and foundations of buildings and structures [1985, p.11-13, rus] 41-278  
Experience and prospects for using seasonally freezing grounds as foundations [1985, p.3-11, rus] 41-277  
Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985) [1985, 119p., rus] 41-276  
Stability of cast-in-situ drilled piles in frost heaving ground during the construction periods [1985, p.23-25, rus] 41-285
- Salo, S.A.**  
Sea ice drift near Bering Strait during 1982 [1987, p.7107-7126, eng] 41-4265
- Salvail, J.R.**  
Mars: long term changes in the state and distribution of H<sub>2</sub>O [1985, p.535-564, eng] 41-1723
- Salvalaglio, M.A.**  
Some statistical issues in the analysis of global ice loads [1987, p.357-364, eng] 41-2443
- Samarin, A.**  
Methodology of modeling for concrete durability [1987, p.1205-1225, eng] 41-3724
- Samarin, I.U.A.**  
Frost resistance and waterproofness of fresh, steamed, fine-grained concretes without chemical admixtures [1987, p.74-77, rus] 41-4626
- Samarshii, A.A.**  
All-Union tutorial seminar on mathematical modeling in science and technology. Summaries [1986, 333p., rus] 41-2381
- Mathematical modelling. Processes in: complex economic and ecological systems [1986, 295p., rus] 41-547**
- Sambuk, S.G.**  
Classification of the lichen and green-moss pine forests of the northwestern European USSR [1986, p.1468-1479, rus] 41-3023
- Samochnernov, I.U.G.**  
Subway construction under severe climatic conditions [1986, p.15-17, rus] 41-1532
- Samodurova, T.V.**  
Modeling the road icing process [1986, p.77-78, rus] 41-2383
- Samolov, R.S.**  
Determining strength characteristics of loose snow [1985, p.101-103, eng] 41-1689  
Glaciologists of the Academy of Sciences of the USSR for the front [1986, p.19-25, rus] 41-1819  
Trafficability of snow cover by wheeled vehicles from experimental data [1986, p.146-153, rus] 41-2168  
Variability of snow cover properties in medium-high mountains [1986, p.150-155, rus] 41-1659
- Samson, J.A.**  
Aerosol transport processes in the Antarctic [1985, p.205-206, eng] 41-3324
- Samsonova, T.I.**  
Use of modified siloxane compositions in small-scale modeling of dynamic phenomena in power engineering structures [1985, p.7-13, rus] 41-427
- Samukashvili, R.D.**  
Approximate calculation of the sums of global radiation on slopes of the Caucasus [1985, p.78-89, rus] 41-847
- Sanders, J.P.**  
Dynamic thermal performance of insulated metal deck roof systems [1986, p.53-63, eng] 41-1379
- Sanderson, T.J.O.**  
Advances in ice mechanics in the United Kingdom [1987, p.1-5, eng] 41-2930  
Ice loads on offshore structures: the transition from creep to fracture [1986, p.157-161, eng] 41-1286
- Sandkvist, J.**  
Brash ice effects on ship operations—a presentation of the SSPA manoeuvring simulation model and other brash ice related projects [1986, p.1021-1038, eng] 41-1144
- Sandorff, P.E.**  
Nose-torquer electro-impulse deicing systems [1984, 10 col. + 4 sheets, eng] 41-2496
- Sandrighello, I.N.**  
Effectiveness of different versions of mining development in the Polar Urals [1985, p.45-49, rus] 41-209
- Sandven, S.**  
High-frequency internal wave observations in the marginal ice zone [1987, p.6911-6920, eng] 41-4247
- Santachiara, G.**  
Properties of ice accreted in a two stage growth [1984, p.283-286, eng] 41-4401  
Properties of ice accreted in two-stage growth [1986, p.1057-1080, eng] 41-1475
- Santeford, H.S.**  
Composite resistance to flow with an ice cover [1987, p.812-817, eng] 41-4223  
Field measurements under winter conditions [1986, 323p., eng] 41-533
- Sanville, D.**  
Arapaho rock glacier, Front Range, Colorado, U.S.A.: a 25-year resurvey [1986, p.349-352, eng] 41-1182
- Sapegin, D.D.**  
Geomechanical studies of power supply structure foundations [1985, 120p., rus] 41-3126
- Saprykina, N.A.**  
Mobile dwellings for the North [1986, 215p., rus] 41-3012
- Sarafin, R.**  
Determination of the spallogenic radionuclides Al-26 and Mn-53 in antarctic meteorites with respect to cosmic ray exposure and terrestrial ages [1987, p.191-195, eng] 41-4608
- Sarkar, S.**  
Durability of an arctic concrete [1987, p.919-933, eng] 41-3713
- Sarkisov, S.L.**  
Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples [1985, p.71-78, rus] 41-846
- Särner, E.**  
Effect of snowmelt on the active sludge process [1982, p.17-33, swe] 41-2855  
Sludge freeze-thaw dewatering—an alternative for small wastewater treatment plants [1982, p.164-180, swe] 41-2856
- Sarukhanian, E.**  
Ice Island underfoot [1986, 175p., rus] 41-3250
- Sarukhanian, E.I.**  
Southern ocean thermohaline water stratification according to ice cover data of the "Weddell-POLEX-81" expedition [1986, p.18-27, rus] 41-4183  
Soviet-American field experiment "Weddell-POLEX-81" [1986, p.9-18, rus] 41-4182  
Water masses and circulation of the southern ocean [1986, 288p., rus] 41-1013
- Sasaguchi, K.**  
Heat transfer characteristics of a latent heat storage unit with a finned tube, Pts. 1 and 2 [1986, p.2978-2992, eng] 41-2110
- Sasaki, T.**  
Ice ramps and the history of studies on them [1986, p.215-221, jpn] 41-2605
- Sassen, K.**  
Orographic cloud microphysical observations with dual-channel microwave radiometer, K(u)-band radar and polarization lidar [1984, p.801-804, eng] 41-4421  
Orographic layer cloud structure derived from comprehensive remote sensing measurements at C.O.S.E. [1982, p.318-321, eng] 41-23  
Polarization and Brewster angle properties of light pillars [1987, p.570-580, eng] 41-3150
- Sato, A.**  
Experimental study of plastic wave velocity in snow [1987, p.183-196, jpn] 41-4007
- Sato, I.**  
Adhesive layer for overlay with thin concrete blocks [1987, p.525-540, eng] 41-4035
- Sato, K.**  
Changes in properties of asphalt concretes due to aging [1987, p.85-116, eng] 41-4022  
Dielectric characteristics of snow in microwave frequency [1986, p.823-825, eng] 41-1467
- Sato, N.**  
On the snow crystals of cold temperature types [1984, p.169-172, eng] 41-4384
- Sato, T.**  
Dielectric characteristics of snow in microwave frequency [1986, p.823-825, eng] 41-1467  
Snow drain system—velocity formula for snow-laden water flow [1983, p.9-16, eng] 41-4133
- Srtot, H.**  
Photosynthetic nature of ice-algae under fast ice near Syowa Station, Antarctica [1986, p.34-42, eng] 41-3631
- Setterfield, K.M.**  
Iceberg detection by radar [1985, p.405-410, eng] 41-218
- Sauchyn, D.J.**  
Particle size and shape variation on alpine debris fans, Canadian Rocky Mountains [1986, p.191-217, eng] 41-1255
- Sauer, A.**  
Winter service on the municipal highways [1985, p.37-40, ger] 41-368
- Saulsleja, A.**  
Great Lakes climatological atlas [1986, 145p., eng] 41-1577
- Saunders, C.P.R.**  
Collection efficiencies of soft-hail pellets for ice crystals [1984, p.177-178, eng] 41-4386  
Observations of ice particle charge in convective clouds in Florida and Montana [1982, p.566-567, eng] 41-47
- Saunders, J.F.**  
Control and method for defrosting a heat pump outdoor heat exchanger [1982, 14 col., eng] 41-1993
- Saunders, R.S.**  
Properties of filamentary sublimation residues from dispersions of clay and ice [1986, p.94-104, eng] 41-527
- Sause, R.**  
Limit state probabilistic design of offshore Arctic pipelines [1987, p.115-123, eng] 41-4632
- Sauter, D.**  
Collection of aerosol particles by snow crystals [1985, p.171-176, eng] 41-1493
- Savage, H.F.**  
Repulsive regularities of water structure in ices and crystalline hydrates [1986, p.717-720, eng] 41-617
- Savchenko, V.G.**  
Ice cover effect on surface and internal free gravity waves [1986, p.103-110, rus] 41-4203
- Savel'ev, B.A.**  
Calculating temperature regime of artificial ice-bearing earth structures by the finite elements method [1986, p.166-168, rus] 41-2836  
Structure and mechanical properties of artificial ice [1986, p.169-176, rus] 41-2837  
Using a three-dimensional sea-water freezing technique in building artificial ice structures [1986, p.172-176, rus] 41-2173
- Savel'ev, B.I.**  
Contemporary methods in antarctic cartography [1986, p.23-25, rus] 41-3533
- Savigny, K.W.**  
Creep behaviour of undisturbed clay permafrost [1986, p.515-527, eng] 41-2471  
In situ analysis of naturally occurring creep in ice-rich permafrost soil [1980, 355p., eng] 41-4596  
In situ creep properties in ice-rich permafrost soil [1986, p.504-514, eng] 41-2470
- Savina, L.N.**  
Taiga forests of northern Asia in Holocene [1986, 189p., rus] 41-2258
- Savkin, V.M.**  
Drainage of the Ob' River basin and its utilization [1986, 135p., rus] 41-4572



- Savkin, V.M. (cont.)**  
Use of water resources and the formation of water-reservoir shores in Siberia [1986, p.3-7, rus] 41-811
- Savvin, E.D.**  
Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams [1986, p.3-7, rus] 41-4547
- Savvinov, K.N.**  
Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams [1986, p.3-7, rus] 41-4547
- Sawa, J.**  
Cracking due to frost action in Portland cement concrete pavements—a literature survey [1987, p.781-803, eng] 41-3706
- Saxena, V.K.**  
Airborne measurements of the antarctic cloud water acidity [1985, p.201-203, eng] 41-3323
- Sayao, O.J.**  
Field measurements of sediment transport on the Scott shelf. Vol. 2. Boundary layer measurements and sand transport prediction [1986, 114p. + appends., eng] 41-3189
- Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program [1986, 195p., eng] 41-3030
- Sayed, M.**  
Ice cover deformations at Adams Island, winter 1982-1983 [1986, p.346-354, eng] 41-1160
- Ice stress measurements in a rubble field surrounding a caisson-retained island [1986, p.255-262, eng] 41-1597
- Sayles, F.H.**  
Classification and laboratory testing of artificially frozen ground [1987, p.22-48, eng] 41-2756
- Research on transportation facilities in cold regions [1986, 105p., eng] 41-639
- Sazhin, V.S.**  
Experience and prospects for using seasonally freezing grounds as foundations [1985, p.3-11, rus] 41-277
- Studying the performance of pyramidal piles in frost heaving ground [1985, p.13-15, rus] 41-279
- Sazonov, G.M.**  
Results of field observations of seasonal ground freezing dynamics [1985, Soil freezing, rus] 41-309
- Sazykin, A.I.**  
State of corrugated metal culverts during operation [1986, p.12-13, rus] 41-1531
- Scandinavian report**  
Scandinavian report [1983, p.S1-S16, eng] 41-2226
- Scanlon, J.M.**  
Concrete durability [1987, 2179p. (2 vols.), eng] 41-3690
- Schaefer, J.A.**  
Experiments on freeze-bonding between ice blocks in floating ice rubble [1986, p.397-403, eng] 41-4295
- Schafer, C.T.**  
Reconnaissance survey of benthonic foraminifera from Baffin Island fiord environments [1986, p.232-239, eng] 41-1867
- Schaffhauser, H.**  
Avalanche and meteorological summaries for Austria, winter 1984/85 and 1985/86 [1986, 90p., ger] 41-2492
- Snow cover development in relation to weather conditions (exemplified by an alpine slope) [1984, p.205-224, ger] 41-715
- Scharfen, G.**  
Large-scale patterns of snow melt on Arctic sea ice mapped from meteorological satellite imagery [1987, p.200-205, eng] 41-4458
- Schjölberg, P.**  
Environmental conditions under polar lows [1986, p.343-357, eng] 41-1815
- Schlapman, W.J.**  
Snow caster having ring gear and spur gear drive means [1983, 8 col., eng] 41-1984
- Schlatter, R.P.**  
Iceberg sightings during SIBEX-2, Chile, in Bransfield Strait, 1985 [1986, p.89-93, spa] 41-2812
- Schleuter, R.S.**  
Conceptual oil dispersion modeling lower Cook Inlet-Shelikof Strait [1984, p.389-469, eng] 41-1783
- Schlosser, P.**  
Helium-3 balance of the upper layers of the northwest Weddell Sea [1987, p.365-377, eng] 41-4602
- Schmelsner, D.**  
Electronic structure of hydrogen-bonded H<sub>2</sub>O [1983, p.3279-3286, eng] 41-2318
- Schmid, H.C.**  
Winter operating safety of tunnel water lines [1986, p.324-326, ger] 41-1564
- Schmidli, R.J.**  
Weather extremes [1981, 15p., eng] 41-2529
- Schmidt, R.M.**  
Low-velocity impact penetration of an ice layer over water [1986, p.439-449, eng] 41-2669
- Schmitt, W.**  
Device for attachment to motor vehicle windows to prevent fogging or icing [1983, 6 col., eng] 41-1767
- Schmoll, H.R.**  
Description and interpretation of geologic materials from shot-holes drilled for the Trans-Alaska Crustal Tract Project, Copper River basin, Alaska, May 1985 [1986, 18p., eng] 41-4106
- Schneider, E.**  
Explanatory text to the map of Lewis Glacier, Mount Kenya, 1983 [1984, p.177-195, ger] 41-634
- Schneider, H.**  
Evaluation of strain rate measurements on a 20 m deep firn pit, applying a Newtonian model (Kesselwandferner, Otztal Alps, 1967-1978) [1984, p.169-176, eng] 41-633
- Schnell, R.C.**  
Ice nucleus measurement intercomparisons using three systems and three natural ice nucleants [1982, p.119-122, eng] 41-11
- Schoenberger, L.M.**  
Mesoscale features of the Michigan land breeze using PAM II temperature data [1986, p.127-135, eng] 41-3136
- Schoenthaler, L.**  
Grand Banks ice-scour catalogue [1986, p.200-203, eng] 41-3111
- Hibernia ice-scour model studies [1986, p.118-121, eng] 41-3099
- Schoettle, S.**  
Costs to the public due to use of corrosive deicing chemicals and a comparison to alternate winter road maintenance procedures [1983, 35p., eng] 41-4607
- Schofield, A.N.**  
Centrifugal modelling of sea ice [1986, p.105-113, eng] 41-1586
- Schohl, G.A.**  
Naled ice growth [1986, 187p., eng] 41-80
- Naled ice growth [1986, 205p., eng] 41-2589
- Theory and laboratory observations of naled ice growth [1986, p.168-177, eng] 41-676
- Schönenberger, W.**  
Growth forms and ecology of *Nothofagus solandri* at the alpine timberline, Craigieburn Range, New Zealand [1984, p.361-370, eng] 41-1236
- Schrader, E.**  
Durability of shotcrete [1987, p.1071-1101, eng] 41-3719
- Schreiber, F.R.**  
Resistance of concrete pavements to frost, and chemical deicing agents [1987, p.87-92, ger] 41-3547
- Schroeder, J.A.**  
Ground-based detection of aircraft icing conditions using microwave radiometers [1986, p.975-982, eng] 41-2302
- Schroff, K.**  
High-precision distance measurement with an unmanned moving target [1986, p.93-95, eng] 41-746
- Schubert, A.**  
Glacial and periglacial investigations in Skidadalum, Tröllaskagi, Northern Iceland [1986, p.1-18, eng] 41-1788
- Schubert, G.**  
Climatic warming and basal melting of large ice sheets: possible complications for East Antarctica [1987, p.33-36, eng] 41-2947
- Explosive growth of shear-heating instabilities in the down-slope creep of ice sheets [1986, p.314-320, eng] 41-4282
- Shear heating instabilities of large ice sheets [1985, p.74-75, eng] 41-2634
- Schuler, J.L.**  
Arctic surface warfare hovercraft [1986, p.355-377, eng] 41-941
- Schulson, E.M.**  
Compressive strength of ice containing a bimodal distribution of grain sizes [1987, p.167-172, eng] 41-2418
- Fracture toughness of ice over a range of grain sizes [1985, 10p. + figs., eng] 41-1680
- Strength and ductility of ice under tension [1985, 20p., eng] 41-1679
- Schultz, D.G.**  
Continuation of glaciogeophysical survey of the interior Ross Embayment: summary of 1984-1985 field work [1985, p.63-64, eng] 41-2626
- Digital radar system for echo studies on ice sheets [1987, p.206-210, eng] 41-4459
- Schumacher, T.**  
*Lamprospora miniatopsis* Spooner, a bryophilous discomycete from Bouvetøya [1986, p.61-64, eng] 41-921
- Schütze, H.**  
Isotope research in Antarctica [1985, p.2-5, ger] 41-76
- Schuyler, G.D.**  
Snow control for sloped glazing—an energy penalty [1986, p.443-448, eng] 41-1382
- Schwake, A.**  
Partial phase diagram for the system NH<sub>3</sub>-H<sub>2</sub>O: the water-rich region [1985, p.39-47, eng] 41-1695
- Schwarz, F.K.**  
Standard project storm precipitation and snowmelt temperature criteria for the 9,570-square mile Clearwater River drainage above Spaulding, Idaho [1986, 146p., eng] 41-2215
- Schwarz, J.**  
Advances in icebreaker technology in West Germany [1986, p.201-219, eng] 41-2028
- Big HSWA-ice-tank two years in service now [1986, p.1487-1491, ger] 41-2194
- Determination of mechanical properties of ice by quantum statistical approach and experiments [1987, p.245-252, eng] 41-2428
- Some latest developments in icebreaker technology [1986, p.161-167, eng] 41-977
- Schweger, C.**  
Gearchaeology of northern regions: lessons from cryoturbation at Onion Portage, Alaska [1985, p.127-141, eng] 41-1358
- Scialdone, J.**  
Comparison of Northern Hemisphere snow cover data sets [1987, p.53-68, eng] 41-3341
- Sciallia, G.**  
Snow emergency: vehicles occasionally equipped with a snow removal blade [1987, p.21-25, ita] 41-4102
- Scientific Committee on Antarctic Research. Group of Specialists on Antarctic Climate Research**  
Antarctic climate research, No.1 [1986, 31p., eng] 41-1071
- Scott, D.G.**  
Staffing of maintenance crews during winter months [1985, p.12-21, eng] 41-656
- Scott Polar Research Institute**  
SPRI review—86; sixtieth annual report: year ending September 1986 [1986, 26p., eng] 41-4085
- Scrimger, J.A.**  
Underwater noise due to rain, hail, and snow [1987, p.79-86, eng] 41-2332
- Sdobnikova, N.V.**  
Soil algae in southern tundras of Taymyr [1986, p.68-79, rus] 41-1333
- Sea ice modelling in the East Greenland area**  
Sea ice modelling in the East Greenland area [1986, p.147-156, eng] 41-1590
- Sea ice off the Icelandic coasts, Oct. 1983-Sep. 1985**  
Sea ice off the Icelandic coasts, Oct. 1983-Sep. 1985 [1986, 43p., ice] 41-2446
- Sea ice off the Icelandic coasts, Oct. 1985-Sep. 1986**  
Sea ice off the Icelandic coasts, Oct. 1985-Sep. 1986 [1986, 32p., ice] 41-2490
- Seagraves, M.A.**  
Visible and infrared transmission through snow [1983, p.90-93, eng] 41-2316
- Sealy, C.O.**  
Grouting in difficult soil and weather conditions [1987, p.84-94, eng] 41-3888
- Seers, V.F.**  
Structure of high-density amorphous ice by neutron diffraction [1986, p.3062-3064, eng] 41-2240
- Sebachner, D.I.**  
Atmospheric methane sources: Alaskan tundra bogs, an alpine fen, and a subarctic boreal marsh [1986, p.1-10, eng] 41-1259
- Sebaochzhai, V.V.**  
Dynamics of the development of cryogenic processes and phenomena in the Central Transbaikalia [1985, p.74-76, rus] 41-311
- Secchi, F.**  
Glaciological investigation on the Vedrette di Ries (Alto Adige/South Tyrol) [1985, p.137-143, ita] 41-3181
- Problems arising from collection and interpretation of data for a new glacier inventory [1985, p.156-165, ita] 41-3184
- Sedallahchev, V.A.**  
Safety measures for electric-power objects of the South Yakutia Task Economic Complex [1985, p.91-99, rus] 41-1926
- Sedel'nikov, V.P.**  
Preservation of high-altitude vegetation in the Altai-Sayan Mountains [1986, p.106-108, rus] 41-2461
- Sedov, O.K.**  
Unloading of a large tanker near Mirnyy Station [1986, p.116-119, rus] 41-1267
- Young sea ice as a platform for cargo unloading in Antarctica [1986, p.120-126, rus] 41-1268
- Sedov, R.V.**  
Recent glaciation of the Pekul'ney Range [1986, p.128-130, rus] 41-1653
- Segawa, J.**  
Comments on the map of free-air gravity anomaly of the antarctic region [1986, p.19-22, eng] 41-1471
- Processing of sea gravity data using online navigational information of icebreaker *Shirase* [1986, p.13-18, eng] 41-1470
- Surface configuration of the antarctic ice sheet in the sector 30 deg E-80 deg E using SEASAT altimetry data [1986, p.1-12, eng] 41-1469
- Segercrantz, H.**  
Wärtsilä Arctic Pusher System [1986, p.26-28, eng] 41-89
- Segerkrantz, V.**  
Road construction in Western Siberia [1984, p.408-411, fin] 41-1939
- Sehgal, P.**  
High strength concrete control [1986, p.32-34, eng] 41-1468

- Sel, T.**  
Growth form of ice crystals grown in air at low supersaturation and their growth mechanism [1986, p.30-37, eng] 41-3655
- Selbold, F.**  
Analysis of extreme ice loads measured on USCGC *Polar Sea* [1984, p.241-252, eng] 41-874  
Progress in developing new design guidelines for ice transiting ships [1986, p.537-552, eng] 41-1617  
Review of research on polar class icebreakers to develop arctic ship design guidelines [1986, p.19-40, eng] 41-2022  
Review of research to aid the development of commercial Arctic marine transportation: 1982 trafficability tests on the USCGC *Polar Star* [1985, p.28-35, eng] 41-1557
- Seldal, M.**  
Relict ice scours on King William Island, N.W.T. [1986, p.64-72, eng] 41-3093
- Seldal, K.**  
Large-area deterministic simulation of natural runoff from snowmelt based on Landsat MSS data [1986, p.1013-1017, eng] 41-2303
- Seldor, D.G.**  
Possible role of standing waves in the dynamics of the ice sheet of the Weddell Sea [1986, p.90-93, eng] 41-3681
- Selitz, H.R.**  
Storage and release of water from a large glacier-dammed lake: Russell Lake near Yakutat, Alaska, 1986 [1986, 10p., eng] 41-3303
- Seko, K.**  
Seasonal variation of altitudinal dependence of precipitation in Langtang Valley, Nepal Himalayas [1987, p.41-47, eng] 41-3914  
Seasonal variation of snowline in Langtang Valley, Nepal Himalayas, 1985-1986 [1987, p.49-63, eng] 41-3915
- Sekretarova, N.A.**  
Botanical and geographic observations in lower reaches of the Enmyvaam River (Anadyr' River basin) [1986, p.450-459, rus] 41-989  
Floristic findings in Penkigney Bay, Chukotskiy Peninsula [1986, p.677-683, rus] 41-2563
- Sekundov, A.N.**  
Effect of external turbulence on heat and mass transfer in boundary layers [1985, p.1-8, eng] 41-1005
- Self-lifting derrick towers for the Arctic**  
Self-lifting derrick towers for the Arctic [1985, p.28-29, rus] 41-1515
- Selim, H.M.**  
Method to verify the presence of a trend in studying spatial variability of soil temperature [1986, p.1122-1127, eng] 41-2475  
Retention and release of metals by soils—evaluation of several models [1986, p.131-154, eng] 41-2138
- Sella, G.A.**  
Results of sounding Altai glaciers with a portable radar [1986, p.116-121, rus] 41-1650
- Selinger, F.**  
German automatic weather stations in the Arctic 1942-1945 [1986, p.89-104, eng] 41-2339
- Selivanov, A.S.**  
Calculating metallic structures of excavation equipment [1978, p.8-14, rus] 41-1312  
Physico-mathematical model of caterpillar tractors equipped with scarifier attachments [1978, p.3-7, rus] 41-1311  
Planet Venus [1987, 278p., rus] 41-3689
- Seliverstov, I.U.P.**  
Changes in chemical composition of meltwater in areas of intensive human activities [1986, p.60-68, rus] 41-3210  
Rational use of natural resources under northern conditions. Collection of works [1985, 113p., rus] 41-3433
- Selivold, E.J.**  
Ice formation in hardened cement paste. Part 1. Room temperature cured pastes with variable moisture contents [1986, p.709-720, eng] 41-1998  
Ice formation in hardened cement paste. Part 2. Drying and resaturation on room temperature cured pastes [1986, p.835-844, eng] 41-2000  
Ice formation in hardened cement paste, Pt.3. Slow resaturation of room temperature cured pastes [1987, p.1-11, eng] 41-2895
- Sellmann, P.V.**  
Development of a frazil ice sampler [1986, 12p., eng] 41-3257  
Drill bits for frozen fine-grained soils [1986, 33p., eng] 41-2610  
Monitoring seasonal changes in seafloor temperature and salinity [1986, p.110-114, eng] 41-369
- Selvadurai, A.P.S.**  
Transient effects in low temperature induced failure and fracture initiation in a pavement structure [1987, p.277-301, eng] 41-4026
- Semenov, V.A.**  
Trends in variations of mountain river runoff in the USSR related to climatic changes [1986, p.78-82, 191-195, rus] 41-4345
- Semenova, N.I.**  
Corrosion resistance of steel cores of earth dams and ways of its improvement [1985, p.63-68, rus] 41-434
- Semkin, R.G.**  
Storage and release of major ionic contaminants from the snowpack in the Turkey Lakes watershed [1986, p.215-221, eng] 41-2619
- Semtner, A.J., Jr.**  
Numerical study of sea ice and ocean circulation in the Arctic [1986, p.189-224, eng] 41-149
- Sea, D.**  
Added mass and damping coefficient for certain 'realistic' iceberg models [1986, p.163-174, eng] 41-1287
- Sendstad, E.**  
Coastal ecology and the Arctic oil industry: some elements for future oil-spill contingency planning [1986, p.87-96, eng] 41-347
- Sengupta, S.**  
Melting process within spherical enclosures [1987, p.460-462, eng] 41-3757
- Seppälä, M.**  
Experimental frost shattering of some precambrian rocks, Finland [1986, p.89-100, eng] 41-1847  
Factors controlling ground frost on an aapa mire in Kuusamo, Finland [1986, p.60-67, fin] 41-187  
Origin of palsas [1986, p.141-147, eng] 41-1872
- Seppänen, E.**  
Ship for scientific expeditions to Antarctica [1987, p.244-246, rus] 41-4148
- Seraudrel Barbero, R.**  
Satellite monitoring of Alpine glacier fluctuations [1985, p.150-155, ita] 41-3183
- Serdukov, M.K.**  
Standard pile-driving assembly [1986, p.10-11, rus] 41-1525
- Sergacheva, N.A.**  
Ice adhesion to structural materials and covers and multi-component anti-icing systems [1982, p.96-101, rus] 41-1274
- Sergeev, E.M.**  
Loess deposits of the USSR [1986, 2 volumes (only Vol.2 pertinent), rus] 41-620
- Sergeev, V.I.**  
Chemical stabilization of noncohesive soils [1986, p.25-27, rus] 41-1528
- Sergeev, V.S.**  
Dust control in the open mining of ores at subzero temperatures [1985, p.152-153, rus] 41-2773
- Sergienko, V.G.**  
Flora of the Kanin Peninsula [1986, 147p., rus] 41-1084  
Flora of the north "Sylvan island" on the Kanin Peninsula [1987, p.208-215, rus] 41-3610
- Serov, A.A.**  
Structures of foundations designed for perennially frozen strongly deformable grounds [1986, p.29-32, rus] 41-2797
- Serreze, M.C.**  
Mass balance of two high Arctic Plateau ice caps [1987, p.123-128, eng] 41-3605
- Serson, H.V.**  
Ground survey and mapping of ice edge changes and multi-year sea ice growth along the north coast of Ellesmere Island, N.W.T. [1986, p.96-99, eng] 41-747  
Remote sensing of sea-ice growth and melt-pool evolution, Milne Ice Shelf, Ellesmere Island, Canada [1987, p.145-150, eng] 41-4449
- Setchfield, T.L.**  
Esso-SINTEF Norwegian Arctic Research Program [1986, p.167-178, eng] 41-2272
- Setova, N.B.**  
Designing shallow foundations of low-rise buildings for frost heaving ground [1985, p.45-46, rus] 41-297
- Seung, Y.-H.**  
Buoyancy flux-driven cyclonic gyre in the Labrador Sea [1986, p.115-161, eng] 41-147  
Buoyancy flux-driven cyclonic gyre in the Labrador Sea [1987, p.134-146, eng] 41-4278
- Severskiy, E.V.**  
Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains [1986, p.29-38, rus] 41-3484
- Severskiy, I.V.**  
Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains [1986, p.29-38, rus] 41-3484
- Sermorput' is launched**  
*Sermorput'* is launched [1986, p.24-25, rus] 41-3203
- Seyhan, E.**  
Hydrological characteristics of an Alpine glacial valley in the North Italian Dolomites [1986, p.275-299, eng] 41-2698
- Shabanov, V.M.**  
Setting standards for water-resistance properties of road pavement materials for Siberian conditions [1986, p.106-110, rus] 41-2758
- Shabtaie, S.**  
Continuation of glaciogeophysical survey of the interior Ross Embayment: summary of 1984-1985 field work [1985, p.63-64, eng] 41-2626  
West antarctic ice streams draining into the Ross Ice Shelf: configuration and mass balance [1987, p.1311-1336, eng] 41-3764
- Shadrin, A.V.**  
Studying the working process of hydropneumatic hammers of the EO-2621 excavators [1978, p.74-78, rus] 41-1325
- Shadunts, K.Sh.**  
Forecasting sustained strength of loess soils from numerical modeling of their structure [1986, p.34-42, rus] 41-3394
- Shafer, B.A.**  
Integration of SNOTEL data and remotely sensed snow covered area in water supply forecasting [1986, p.1045-1056, eng] 41-3993
- Shakhov, P.A.**  
Peculiarities of water balance structure in different landscapes of Priangar'e [1986, p.187-193, rus] 41-1375
- Shakhparonov, V.V.**  
Organization of construction under special environmental and climatic conditions. Construction manual [1986, 255p., rus] 41-2862
- Shamanova, I.I.**  
Maps assessing the potential for the development of technogenic thermokarst in the north of western Siberia [1986, p.184-193, eng] 41-3198
- Shamarin, P.A.**  
Some features of providing heat supply to thermal power stations being built in regions of temperate and cold climate [1986, p.421-422, eng] 41-4160
- Shamin, P.A.**  
Alimentation intensity of Late Pleistocene glaciers in the eastern half of the USSR [1986, p.56-64, rus] 41-1638  
Some results and prospects for studying mass balance of glaciers (according to materials of a Hamburg seminar in 1983) [1986, p.179-193, rus] 41-1666
- Shankhla, V.S.**  
Cold starting ability of in-service M113 vehicles [1986, 17p. + appenda., eng] 41-3010  
Improving low temperature startability of M113 vehicles: automatic engine cycling tests [1987, 23p. + appenda., eng] 41-3813
- Shapiro, H.N.**  
Simultaneous heat and mass transfer in soil with application to waste heat utilization [1978, p.19-24, eng] 41-465
- Shapiro, M.A.**  
Arctic Cyclone Expedition, 1984: research aircraft observations over the Norwegian and the Barents Sea [1986, p.79-90, eng] 41-1800
- Shapley, D.**  
Seventh continent: Antarctica in a resource age [1985, 315p., eng] 41-649
- Sharapov, V.N.**  
Remote sensing methods of studying natural resources of Siberia [1986, 192p., rus] 41-3513  
Remote sensing techniques used in solving geobotanical problems [1986, 191p., rus] 41-3970
- Sharbatian, A.A.**  
Cryosphere and the zonality of soil melioration processes [1986, p.94-98, rus] 41-4468
- Sharma, J.**  
Investigation of seasonal load restrictions in Washington State [1985, p.58-67, eng] 41-609
- Sharma, S.S.**  
Criteria for selection of site for construction of structures on a floating ice shelf in Antarctica—a case study [1986, p.298-311, eng] 41-2280  
Criteria for selection of site for construction of structures on a floating ice shelf in Antarctica—a case study [1986, p.1093-1105, eng] 41-1147
- Sharp, D.R.**  
Hazards assessment for a crude oil storage facility operating in an Arctic environment [1987, p.63-67, eng] 41-2403
- Sharp, M.J.**  
Comparison of the landforms and sedimentary sequences produced by surging and non-surging glaciers in Iceland [1982, 380p. + appenda., eng] 41-3141
- Shasby, M.**  
Vegetation and terrain mapping in Alaska using Landsat MSS and digital terrain data [1986, p.779-786, eng] 41-3847
- Shatalova, T.I.U.**  
Compiling maps for evaluating potential thermokarst sagging [1986, p.77-95, rus] 41-2087
- Shata, M.M.**  
Applying satellite information to studying distribution of discontinuous permafrost (the case of the Aldan Plateau) [1986, p.55-59, rus] 41-3518  
Geocryological regionalization of the Far Eastern economic region [1986, p.71, rus] 41-4066  
Problems of geocryological mapping [1986, 172p., rus] 41-3481  
Using satellite information for the regionalization of landscapes in geocryological investigations (the case of Aldan Highlands) [1986, p.49-54, rus] 41-3517
- Shatygina, V.A.**  
New method of erecting thawed-earth dams in the northern construction-climatic zone [1986, p.80-83, rus] 41-2754
- Shaver, G.R.**  
Effect of fertilizer on production and biomass of tussock tundra, Alaska, U.S.A. [1986, p.261-268, eng] 41-1175

- Shaver, G.R. (cont.)**  
Environmental controls over carbon, nitrogen and phosphorus fractions in *Eriophorum vaginatum* in Alaskan tussock tundra [1986, p.167-195, eng] 41-2189  
Factors limiting seasonal growth and peak biomass accumulation in *Eriophorum vaginatum* in Alaskan tussock tundra [1986, p.257-278, eng] 41-2190  
Growth and flowering in *Eriophorum vaginatum*, annual and latitudinal variation [1986, p.1524-1535, eng] 41-2480  
Reproduction of *Eriophorum vaginatum* by seed in Alaskan tussock tundra [1986, p.1-18, eng] 41-2188
- Shaw, G.H.**  
Elastic properties and equation of state of high pressure ice [1986, p.5862-5868, eng] 41-500
- Shaw, R.J.**  
NASA's aircraft icing analysis program [1986, 26p., eng] 41-4157
- Shchegolev, N.F.**  
Waterproofing and corrosion prevention in hydraulic structures [1985, 100p., rus] 41-431
- Shchegolev, S.V.**  
Effectiveness of breaking perennially frozen sands by borehole charges of lesser diameter in underground excavation of placer deposits [1986, p.81-85, rus] 41-2907
- Shchelkanov, A.G.**  
Forecasts and the efficiency of fleet performance. Collection of scientific papers [1985, 105p., rus] 41-487
- Shcherbak, A.V.**  
Short-range forecasting of ice-bound state for the lower Danube River [1986, p.155-160, rus] 41-2636
- Shcherbakov, N.M.**  
Structure and dynamics of forest landscapes in Karelia [1985, 184p., rus] 41-189
- Shchetinin, V.V.**  
Stability of hydraulically built-up construction sites under dynamic loads [1986, p.29-31, rus] 41-1529
- Shchetinnikov, A.S.**  
Changes in glacial runoff of Central Asian rivers in relation to possible climatic variations [1986, p.59-70, rus] 41-776
- Shchukin, G.G.**  
Determining some characteristics of fast and drifting ice with the meteorological radar-2 station [1985, p.66-70, rus] 41-3430
- Shchuklenkova, O.N.**  
Selection of architectural and structural types and technical-economic analyses of timber-transporting ships [1984, p.29-37, rus] 41-542
- Shearer, J.**  
Canadian Beaufort Sea 1984 repetitive mapping of ice scour [1986, 43p. + append. + maps, eng] 41-1566  
Ice scour mosaic comparison study, 1980 [1980, 17p. + figs., eng] 41-3474  
Regional correlation of Beaufort Sea ice scour extreme depth and relative age with environmental factors [1986, p.167-169, eng] 41-3107  
Towards repetitive mapping of ice scours in the Beaufort Sea [1986, p.284-286, eng] 41-3120
- Sheshan, D.P.**  
Wood damage accumulation by stochastic load models [1986, p.2402-2415, eng] 41-2222
- Sheehy, W.**  
Annealing recrystallization in laboratory and naturally deformed ice [1987, p.(C1)271-(C1)276, eng] 41-3957
- Sheer, T.J.**  
Pneumatic conveying of ice into deep mines [1987, p.155-167, eng] 41-4329
- Shelk-Taheri, A.**  
Ground snow loads for Idaho [1984, p.59-63, eng] 41-1947
- Shetkin, A.E.**  
Frost resistance criteria of cellular, autoclave-hardened concretes [1986, p.31-32, rus] 41-1884
- Shetkin, I.V.**  
Calculated relations among indices of hydrophysical properties of frozen soils [1986, p.151-156, rus] 41-2834
- Shetlin, I.S.**  
Increasing the safety of energy-producing structures under dynamic loading [1985, 113p., rus] 41-426
- Shelekhov, A.M.**  
Biocenotic structure of forests in different landscapes of central taiga [1985, p.16-38, rus] 41-191  
Phytophenotic and ecologic peculiarities of forest types prevailing in different landscapes of central taiga [1985, p.38-45, rus] 41-192
- Shelters provide bad-weather protection, secure construction progress**  
Shelters provide bad-weather protection, secure construction progress [1986, p.1424-1429, ger] 41-1563
- Shemenda, A.I.**  
Model of stresses in the Antarctic lithosphere induced by ice loads [1986, p.97-102, rus] 41-1166
- Shemiakin, E.I.**  
Simple and multiple loading of steel under normal conditions and at low temperatures [1986, p.129-141, rus] 41-1017
- Shen, H.H.**  
Role of floe collisions in sea ice rheology [1987, p.7085-7096, eng] 41-4263
- Shen, H.T.**  
Field investigation of St. Lawrence River hanging ice dams, winter of 1983-84 [1984, 85p., eng] 41-1669  
Hydraulics of river ice [1985, 78p., eng] 41-2935  
Mathematical model for river ice [1987, p.141-146, eng] 41-4221  
Multi-year experience of remote sensing of ice thickness on the St. Lawrence River [1984, p.86-100, eng] 41-1950  
Unsteady flow simulation for an ice-covered river [1986, p.1037-1049, eng] 41-1086  
Winter flow, ice and weather conditions of the upper St. Lawrence River, 1971-81. Volume I: Ice cover charts (Part B) [1982, p.249-505, eng] 41-174
- Shen, W.**  
Experimental investigations on scale effect of Bohai sea ice [1987, p.173-179, eng] 41-2419
- Sheng, K.L.**  
Interaction between solar energetic particles and interplanetary grains [1985, p.273-285, eng] 41-1707
- Shentais, I.D.**  
Methods of using measurements to correct model-based calculations of snow reserves in mountains [1986, p.27-36, rus] 41-543
- Sherbine, C.A.**  
Hazards assessment for a crude oil storage facility operating in an Arctic environment [1987, p.63-67, eng] 41-2403
- Sheremet'ev, A.N.**  
Measurements of glacier thickness and flow velocity along the traverse Mirnyy-Komsomolskaya-Dome B [1986, p.127-132, rus] 41-1269
- Sheremet'evskaya, O.I.**  
Ice on the seas of northwestern part of the USSR and the wind in equatorial stratosphere [1986, p.128-131, rus] 41-120  
Space-time variations in ice conditions of the Barents, White and Baltic seas [1986, p.88-93, rus] 41-4200
- Sherman, J.W., III**  
Future satellite systems for oceanic and cryospheric observations [1986, p.257-267, eng] 41-3987
- Sherstink, B.F.**  
Lowering piles into holes drilled with fire-jet drills in permafrost (the case of northern Tyumen' region) [1986, p.8-10, rus] 41-4615
- Sherstov, V.A.**  
Economic efficiency of using ice pillars for roof control in northern placer mines [1986, p.38-47, rus] 41-4554  
Possibility of using roof-supports made of frozen ice-shingle-gravel mixtures in northern placer mines [1986, p.201-208, rus] 41-2179
- Sherwood, K.W.**  
Geologic report for the Beaufort Sea planning area, Alaska: Regional geology, petroleum geology, environmental geology [1985, 192p. + maps, eng] 41-694
- Sherwood, P.T.**  
Research at TRRL on the frost-susceptibility of roadmaking materials [1981, p.151-160, eng] 41-2928  
Winter air temperatures in relation to frost damage in roads [1986, 15p., eng] 41-2934
- Sheshenia, N.L.**  
Formation of engineering-geological conditions in Central Mongolia [1987, 144p., rus] 41-2983
- Sheshin, I.U.B.**  
Thickness and temperature regime of permafrost in foothill areas of the Kular Range [1986, p.47-50, rus] 41-2818
- Shesler, A.I.**  
Calculating frost resistance of road pavements [1985, p.18-19, rus] 41-508
- Shesternev, D.M.**  
Dynamics of the development of cryogenic processes and phenomena in the Central Transbaikalia [1985, p.74-76, rus] 41-311  
Frost heave of rocks in Central Transbaikalia [1985, p.78-80, rus] 41-313
- Shestopalov, V.P.**  
Combined optical and radar methods for studying the environment [1984, p.963-964, eng] 41-515
- Shetsis, I.D.**  
Macroscale model of snow cover formation in mountainous regions [1986, p.15-27, rus] 41-544
- Shevchenko, B.F.**  
Methods of studying rock streams by repeated phototheodolite surveys [1986, p.130-134, rus] 41-1201
- Shevchenko, L.V.**  
Compressive deformation of frozen saline soils [1985, p.99-100, rus] 41-324
- Shevchenko, V.I.**  
Thermally insulated pipes for construction of industrial over-ground engineering nets [1986, p.28-29, rus] 41-2781
- Shevchenko, V.V.**  
Project of an inhabited lunar base [1986, p.85-98, rus] 41-2308
- Shevelev, V.B.**  
Unification principles in the design of buildings for complicated engineering and geological conditions [1985, p.34-36, rus] 41-291
- Shewchuk, S.R.**  
Snowpack and surface water chemistry survey of small lakes in northern Saskatchewan [1983, 62p., eng] 41-2578
- Shi, W.Q.**  
Analysis and research of hailstone micro-structure [1982, p.450-452, eng] 41-55
- Shi, Y.**  
Where are the former glacial relics in Guilin area [1986, p.97-106, chi] 41-1457
- Shibakin, V.F.**  
Automatic low-temperature calorimeter [1986, p.1456-1459, eng] 41-995
- Shibakova, V.S.**  
Discussion on topics of engineering-geological investigations of permafrost [1987, p.120, rus] 41-4623
- Shibuya, K.**  
Glacio-geophysical implication of an NNSS positioning in and around Syowa Station, East Antarctica [1986, p.327-346, eng] 41-2212  
Surface configuration of the antarctic ice sheet in the sector 30 deg E-80 deg E using SEASAT altimetry data [1986, p.1-12, eng] 41-1469
- Shichiri, T.**  
Nucleation mechanism of ice crystals under electrical effect [1986, p.502-508, eng] 41-2105
- Shields, D.H.**  
Effect of hydrostatic stress on creep of a frozen sand [1987, p.119-124, eng] 41-2412
- Shih, S.F.**  
Using GOES thermal infrared data to map freeze zones for citrus and consequences for water management [1987, p.737-743, eng] 41-3777
- Shilakovskii, V.I.**  
Structural anomalies in ice-forming silver iodide aerosols [1986, p.97-99, rus] 41-1454
- Shilin, N.A.**  
Developing and standardizing methods of determining the structural properties of frozen grounds [1983, p.19-21, rus] 41-4482
- Shilta, W.W.**  
Potential effects of acid rain on glaciated terrain [1984, p.135-156, eng] 41-2117
- Shimada, A.**  
Apparatus for deicing of trolley wires [1980, 12 col. + 5 sheets, eng] 41-2372
- Shimba, M.**  
Dielectric characteristics of snow in microwave frequency [1986, p.823-825, eng] 41-1467
- Shimbo, M.**  
Friction on snow of ski soles, unwaxed and waxed [1971, p.99-112, eng] 41-3907
- Shimbori, K.**  
Development of an ice core drill for liquid-filled holes [1986, p.86-92, eng] 41-3662
- Shimizu, H.**  
Short-time forecasting of snowfall by lidar [1986, p.2109-2114, eng] 41-1216
- Shimizu, J.A.**  
Polyethylene-modified bitumen for paving applications [1986, p.2685-2704, eng] 41-829
- Shimizu, N.**  
Ice as capacitor dielectric [1985, p.539-542, eng] 41-3349
- Shimomura, R.**  
Characteristics of ice formation in a curved channel containing flows. Part I: Unsteadiness of initial solidification and heat transfer at water-ice interface [1987, p.294-301, eng] 41-3401
- Shimura, K.**  
Dielectric studies of RbOH-doped ice and its phase transition [1986, p.4485-4491, eng] 41-2468
- Shinde, S.B.**  
Ice conditions around Issungnak, 1979-80. Data report [1981, 58p. + figs., append., eng] 41-3551  
Ice conditions at Issungnak, 1978-79 [1981, 25p. + append., eng] 41-3561
- Shinoda, K.**  
Basic research on the latent heat thermal energy storage utilizing the contact melting phenomena [1986, p.2946-2952, eng] 41-2109
- Shioya, T.**  
Development of composite members for Arctic offshore structures [1986, p.660-677, eng] 41-1123
- Shpilitsyn, V.**  
Under severe climatic conditions. Special characteristics and problems of the construction of the Novosibirsk subway [1986, p.7-9, rus] 41-3738
- Shipovskii, O.M.**  
Improving the cleaning, hydraulic testing and water expulsion on main pipelines in freezing weather [1987, p.29-31, rus] 41-3736
- Shirai, K.**  
Simultaneous change of water content, solute and temperature profiles in a partially frozen unsaturated soil [1986, p.11-17, jpn] 41-3750
- Shirai, Y.**  
Analysis of ice crystallization in continuous crystallizers based on a particle size-dependent growth rate model [1986, p.2241-2246, eng] 41-1348
- Shirakashi, M.**  
Hydraulic conveying of snow. 7. Energy loss of snow/water mixture flow combining at a T-junction of pipes [1986, p.75-82, jpn] 41-440

- Hydraulic conveying of snow. 9. Development of techniques for high snow concentration [1987, p.59-66, jpn] 41-4320
- Measurements of the snow fraction in a snow/water mixture flow in a pipe [1986, p.2156-2160, eng] 41-3407
- Shirasawa, K.**  
Water stress and ocean current measurements under first-year sea ice in the Canadian Arctic [1986, p.14,305-14,316, eng] 41-1858
- Shishkin, V.I.A.**  
Studying the performance of pyramidal piles in frost heaving ground [1985, p.13-15, rus] 41-279
- Shishkina, L.P.**  
Flora of overgrown gullies [1986, p.67-70, rus] 41-1165
- Shishkina, N.P.**  
Peculiarities of hydrochemical regime of lakes and suprapermafrost ground waters of alassy in the Vilyuy River basin [1985, p.110-130, rus] 41-258
- Shkhorina, Zh.G.**  
Underground ice in western Siberia: origin and geological significance [1986, p.173-183, eng] 41-3197
- Shitikova, T.E.**  
Chemical element balance in the end-moraine landscapes of southern taiga [1985, p.104-113, rus] 41-1818
- Shue, J.C.**  
Observation of passive microwave emission from snowpack [1984, p.75-85, eng] 41-1949
- Shkodkin, A.V.**  
Investigation of ice-forming activity of aerosols of copper acetylacetonate in a supercooled two-phase flow [1986, p.21-24, eng] 41-3678
- Shkol'nikov, I.E.**  
Studies and calculations in structural design and building technology of hydraulic transport structures [1986, 96p., rus] 41-2908
- Shkonda, K.V.**  
Scientific-chronological progress and the development of natural resources of the North [1985, p.42-51, rus] 41-3435
- Shkundin, B.M.**  
Hydromechanization in construction of electric power plants [1986, 224p. (pertinent p.156-174), rus] 41-619
- Shkurko, A.M.**  
Borehole gas sampler for determining absolute age of ice by carbon isotope analysis [1984, p.72-78, rus] 41-2355
- Shlaen, A.G.**  
Calculating frost resistance of concrete used in land reclamation construction [1986, p.19-22, rus] 41-2553
- Shliakov, R.N.**  
Bryo-lichenologic investigations in the USSR [1986, 118p., rus] 41-2775
- Shloido, G.A.**  
Determining the parameters of ripper-tooth extensions [1978, p.14-20, rus] 41-1313  
Probability analysis of variations in the resistance of frozen ground to ripping [1978, p.20-25, rus] 41-1314
- Shlygin, I.A.**  
All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings [1986, 236p., rus] 41-702
- Shlykov, V.V.**  
Influence of extra-low frequency electromagnetic fields on freezing of supercooled water drops [1986, p.32-40, rus] 41-3464
- Shmal', G.I.**  
Modular construction of oil and gas industry objects. Manual [1986, 576p., rus] 41-1746
- Shmarev, S.I.**  
Self-similar solution of multidimensional Stefan problem [1986, p.95-99, rus] 41-1627  
Self-simulating multivariate Stefan problem [1986, p.126-146, rus] 41-2351
- Shmygleva, G.M.**  
Conditions conducive to glacial mudflow in the Aktru River valley, Altai Mountains, June 24, 1984 [1986, p.121-124, rus] 41-1651
- Shmyria, A.I.**  
Experimental thawing of the permafrost base beneath the reconstructed main body of the Chita-I heat and electric power plant [1986, p.9-10, rus] 41-4617
- Shoemaker, E.M.**  
Debris-influenced sliding laws and basal debris balance [1986, p.224-231, eng] 41-682  
Subglacial drainage for an ice sheet resting upon a layered deformable bed [1987, p.4935-4946, eng] 41-3342
- Shoemaker, H.D.**  
Low adhesion coatings for sea spray ice on offshore drilling units in northern waters [1986, p.512-527, eng] 41-1116  
Overview: Arctic and offshore research [1986, p.59-62, eng] 41-366
- Shor, A.N.**  
Study of iceberg scours across the continental shelf and slope off southeast Baffin Island using the Sea MARC I midrange sidescan sonar [1987, p.847-857, eng] 41-4014
- Short, S.K.**  
Deglaciation of the mountainous region of northwestern Montana, U.S.A., as indicated by late Pleistocene ashes [1986, p.317-325, eng] 41-1179
- Pollen, vegetation, and climate relationships along the Dalton Highway, Alaska, U.S.A.: a basis for Holocene paleoecological and paleoclimatic studies [1986, p.57-72, eng] 41-1188
- Shpet, N.G.**  
Reinforcement of ice bridges over rivers via layer-by-layer ice buildup [1986, p.63-70, eng] 41-1855
- Shpin', P.S.**  
General characteristics of avalanche formation and danger in Kuznetzkiy Alatau [1984, p.55-57, rus] 41-1905
- Shpolianskaia, N.A.**  
Peculiarities and regularities governing the behavior of frost-susceptible soils in different landscapes affected by industrial activities [1985, p.103-105, rus] 41-326
- Shroder, J.F., Jr.**  
Tree-ring analysis of movement of a rock-glacier complex on Mount Mestas, Colorado, U.S.A. [1984, p.299-309, eng] 41-1232
- Shtelman, A.Sh.**  
Basic design features of the Neryungri power plant [1986, p.8-12, rus] 41-1400
- Shtetlbrener, A.F.**  
Using satellite information for the regionalization of landscapes in geocryological investigations (the case of Aldan Highlands) [1986, p.49-54, rus] 41-3517
- Shuchman, R.A.**  
Remote sensing of the Fram Strait marginal ice zone [1987, p.429-431, eng] 41-2803  
SAR/SCAT intercomparison of microwave signatures of Arctic sea ice [1986, p.1.7.1-1.7.3, eng] 41-96  
Use of synthetic aperture radar-derived kinematics in mapping mesoscale ocean structure within the interior marginal ice zone [1987, p.6837-6842, eng] 41-4241
- Shugae, F.V.**  
On the microstructure and ice water content of high clouds [1984, p.73-76, eng] 41-4375
- Shutskii, I.U.D.**  
Problems of studying sediment balance in coastal zones of seas [1986, 240p., rus] 41-516
- Shul'man, S.A.**  
Bridge piers without grillage under complicated natural conditions [1987, p.16-17, rus] 41-2793
- Shulson, E.M.**  
Fracture toughness of freshwater ice as a function of loading rate [1986, p.287-296, eng] 41-1599
- Shumakov, L.I.**  
Studies of ice-forming properties of phloroglucinol under field conditions [1986, p.116-123, rus] 41-3465
- Shumova, G.M.**  
Influence of Late Pleistocene glaciation on the development of climate and vegetation in the coastal zone of central Primor'e [1986, p.157-161, rus] 41-126
- Shumskii, P.A.**  
Dynamics and thermal regime of glaciers [1986, p.34-39, 152-157, rus] 41-4337  
Induced fluctuations of the Shumskiy glacier in Dzhungarskiy Alatau [1986, p.38-44, 168-173, eng] 41-1052  
Numeric modeling of evolution of the Greenland ice sheet [1984, p.892-903, eng] 41-2074
- Shur, I.U.L.**  
Origin of Edoma deposits [1986, p.108-113, rus] 41-2090
- Shurygin, V.P.**  
Ice loads on power lines in windy weather [1985, p.100-107, rus] 41-1545  
Improvement of structures, methods of design, and construction of railroad electrification, signalization and centralization block and communication systems [1985, p.121p., rus] 41-1541  
Properties of combined aggregate concretes of centrifuged power line supports [1985, p.5-11, rus] 41-1542
- Shutkina, S.V.**  
Parametrization of the structure of the active sea layer in the ice-edge zone [1986, p.146-150, eng] 41-3266
- Shuto, N.**  
Snow drain system—velocity formula for snow-laden water flow [1983, p.9-16, eng] 41-4133
- Shuto, Y.**  
Transmission loss of thermotropic liquid-crystal polyester-jacketed optical fibre at low temperature [1984, p.199-201, eng] 41-1916
- Shvetsov, P.F.**  
Ground ice [1986, p.36-45, rus] 41-2534  
New information on rock streams [1983, p.103-105, rus] 41-4485  
Origin of Edoma deposits [1986, p.108-113, rus] 41-2090  
Physical geocryology [1986, 177p., rus] 41-2885
- Shvyrykov, N.N.**  
Using satellite data for calculating ocean-atmosphere heat transfer in the Newfoundland energy-active oceanic zone in winter [1986, p.32-41, rus] 41-1540
- Shyam Sunder, S.**  
Ice load prediction during indentation [1986, p.297-309, eng] 41-1600  
Sea-ice indentation in creeping mode [1987, p.965-983, eng] 41-3762
- Si, Y.**  
Some relationship between antarctic ice extent and climate [1983, p.303-309, chi] 41-673
- Siddalingaiah, H.**  
Characterization of snow and ice reflectance zones on glaciers using Landsat thematic mapper data [1987, p.104-108, eng] 41-4444
- Sidle, R.C.**  
Shallow groundwater fluctuations in unstable hillslopes of coastal Alaska [1984, p.79-95, eng] 41-627
- Sidorov, M.P.**  
Changes in physical and mechanical properties of frozen ground used as construction material [1986, p.30-34, rus] 41-3443
- Siegenthaler, U.**  
Biospheric CO<sub>2</sub> emissions during the past 200 years reconstructed by deconvolution of ice core data [1987, p.140-154, eng] 41-3196
- Sievers, M.F.**  
Antarctic automatic weather station data for the calendar year 1985 [1986, 254p., eng] 41-877
- Sihvola, A.**  
Snow fork for field determination of the density and wetness profiles of a snow pack [1986, p.717-721, eng] 41-851  
Snow fork for field determination of the density and wetness profiles of a snow pack [1986, p.225-230, eng] 41-3901
- Sikonia, W.G.**  
Velocity and surface altitude of the lower part of Hubbard Glacier, Alaska, August 1978 [1986, 13p., eng] 41-3227
- Sikström, A.**  
Yellow spots on the ice of Lake Mälaren [1982, p.226-230, swe] 41-2857
- Silaenkov, E.S.**  
Service life of cellular concrete products [1986, 175p., rus] 41-1683
- Silaev, A.V.**  
Improved sampler PLIAS-2 for capturing ice-forming nuclei on membrane filters [1986, p.76-80, rus] 41-1450  
Studying vertical distribution of ice-forming nuclei [1986, p.85-89, rus] 41-1452  
Using equipment designed for the "Selena-1" filters in studying natural and artificial ice-forming nuclei [1986, p.80-85, rus] 41-1451
- Silin, K.S.**  
Construction of deep foundations [1985, 248p., rus] 41-3125
- Sil'nikskii, V.I.**  
Experimental application of rolled concrete mixtures at the construction site of the Bureya hydroelectric power plant in freezing weather [1987, p.8-12, rus] 41-2798  
Performance of the Zeya hydroelectric power plant dam during its initial period [1986, p.18-21, rus] 41-1919  
Thermal regime and the stress-strain state of a concrete dam, built of rolled concrete, under severe climatic conditions [1987, p.35-37, rus] 41-3268
- Silva Martins, L.R.**  
Contribution to the study of sediments in the Bransfield Strait region [1987, p.127-146, por] 41-3156
- Silver, M.W.**  
Archaeomonad (Chrysophyta) cysts: ecological and paleoecological significance [1986, p.289-298, eng] 41-4609
- Silvers, J.P.**  
New materials and concepts to reduce energy losses through structural thermal bridges [1986, p.739-750, eng] 41-1387
- Sil'vestrov, L.K.**  
Underground storage of petroleum products in the Far North [1983, p.107-109, rus] 41-520
- Simagin, V.G.**  
Design and erection of foundations in the close vicinity of existing structures. Construction experience in the northwestern USSR [1986, 95p., rus] 41-2911
- Simanovskii, A.M.**  
Effective sectional road pavements for northern regions and Siberia [1986, 96p., rus] 41-2211
- Simu, E.**  
Wind, earthquake, snow, and hail loads on solar collectors [1981, 88p., eng] 41-173
- Simmleitt, N.**  
Behavior of hydrophobic, organic micropollutants in different karst water systems 1: transport of micropollutants and contaminant balances during the melting of snow [1987, p.79-95, eng] 41-3965  
Behavior of hydrophobic, organic micropollutants in different karst water systems 2: filtration capacity of karst systems and pollutant sinks [1987, p.97-109, eng] 41-3966
- Simmons, D.A.**  
Flow of the Brunt Ice Shelf, Antarctica, derived from Landsat images, 1974-85 [1986, p.252-254, eng] 41-686
- Simmons, G.M., Jr.**  
Perennial N<sub>2</sub> supersaturation in an antarctic lake [1987, p.343-345, eng] 41-2506  
Spectral downwelling irradiance in an antarctic lake [1987, p.145-151, eng] 41-3426
- Simms, A.**  
Iceberg-grounding study, Labrador well-site observations [1986, p.269-283, eng] 41-3119
- Simonov, G.A.**  
Woody plants of mountain valleys in Polar Ural Mountains [1986, p.72-80, rus] 41-2250



- Simonov, I.M.**  
Albedo and heat balance of arctic snow-ice surfaces polluted with oil [1986, p.117-120, rus] 41-3869
- Simpkin, P.G.**  
Ice scour and seabed engineering; proceedings of a Workshop on Ice Scour Research [1986, 322p., eng] 41-3086
- Simpson, G.A.**  
Performance of a closed tube thermosyphon with large length-diameter ratios [1987, p.69-77, eng] 41-2404
- Simons, A.**  
Abnormally enriched elemental concentrations in urban snow [1985, p.255-261, eng] 41-1501
- Sinclair, A.J.**  
Sulphide erratics applied to subglacial exploration: St. Elias Mountains, British Columbia [1987, p.723-730, eng] 41-4080
- Singh, A.K.**  
Duplex stainless steel linepipe for Arctic use [1987, p.159-165, eng] 41-4635
- Singh, J.**  
Induction of freezing tolerance in an embryonic cell suspension culture of *Brassica napus* by abscisic acid at room temperature [1986, p.23-32, eng] 41-2225
- Singh, K.P.**  
Seasonal and regional variations of active/passive microwave signatures of sea ice [1987, p.159-173, eng] 41-3316
- Singh, N.**  
Effect of ions on cloud condensation and ice nucleation [1985, p.343-350, eng] 41-2242
- Singhal, A.K.**  
Thermal environment around the Space Shuttle with hot-gas jets for ice suppression [1986, p.547-553, eng] 41-2738
- Sinha, N.K.**  
Acoustic emission study on multi-year sea ice in an arctic field laboratory [1985, p.S290-S293, eng] 41-2309  
Drilling and slotting of ice and permafrost with rotating high pressure water jets [1986, p.177-187, eng] 41-2936  
Effective poisson's ratio of isotropic ice [1987, p.189-195, eng] 41-2421  
Proceedings [1987, 4 vols., eng] 41-2394  
Recent advances in ice mechanics in Canada [1987, p.15-35, eng] 41-2932
- Sinitsyn, I.U.A.**  
Modeling the processes of radar sounding of ice covers [1986, p.123-126, rus] 41-704
- Sin'kevich, A.A.**  
Studies of ice-forming properties of phloroglucinol under field conditions [1986, p.116-123, rus] 41-3465
- Sin'kevich, E.I.**  
Calcium in the peat soils of northern Europe [1986, p.72-84, rus] 41-4117  
Studying comparative intensity of peat mineralization in soils of the Kola Peninsula and southern Karelia [1986, p.64-72, rus] 41-4116
- Sithole V.**  
Results of laboratory tests on AMIR compacted asphalt slabs [1987, p.417-451, eng] 41-4031
- Sitnikova, M.V.**  
Problems of satellite meteorology and remote sensing [1986, 104p., rus] 41-1684
- Sibuev, A.A.**  
Using snow reserve coefficients in calculating maximum annual snow reserves in the Verkhnyaya Katun' River basin [1986, p.100-105, rus] 41-1967
- Sivashkova, V.Kh.**  
Studies of horizontal composition of marginal vegetation in the Salair taiga [1986, p.22-28, rus] 41-2600
- Skachko, A.N.**  
Rational use of shallow foundations on frost-heaving ground [1985, p.16-17, rus] 41-281
- Skarlato, O.A.**  
Peculiarities of ecosystems distribution in the Barents Sea [1986, p.7-8, rus] 41-2386
- Skavronskaya, A.B.**  
Improving thermal insulation of building walls [1986, p.53-60, rus] 41-2920
- Skirina, I.F.**  
Lichen flora in the fir-spruce forests on the eastern slopes of the central Sikhote Alin Mountains [1986, p.111-112, rus] 41-2779
- Skliarov, V.E.**  
Drift ice as a tracer in water circulation studies of marginal seas [1984, p.20-32, eng] 41-818
- Skobeleva, E.I.**  
Glacioclimatic conditions in the European Arctic in the Late Holocene [1986, p.149-154, rus] 41-124
- Skorik, A.V.**  
Water transfer processes and indication of underlying surface saturation by remote sensing [1986, p.45-55, rus] 41-2735
- Skrebkov, G.P.**  
Calculating the non-erosive velocity of a stream for sandy ground in freezing weather [1986, p.74-77, rus] 41-3260
- Skrivov, V.P.**  
Nucleation and growth of crystals in amorphous layers of water, heavy water and organic substances [1985, p.30-43, rus] 41-553
- Skrybykin, A.N.**  
Prospects for using gas-thermal methods of strengthening and rebuilding details of equipment designed for the North [1985, p.116-119, rus] 41-2853
- Skrylnik, G.P.**  
Exogenic relief formation in the Far East [1985, 155p., rus] 41-1908
- Skuba, V.N.**  
Perfecting the methods of developing mineral deposits in the North [1986, 81p., rus] 41-4546
- Skutlin, A.I.**  
Designing routes for complicated geological and climatic conditions in plains [1984, p.66-74, rus] 41-2455
- Skye, E.**  
Climate and glaciation in Kong Karls Land, eastern Svalbard [1984, p.291-302, eng] 41-2007
- Slagoda, E.A.**  
Possibility of using the transient processes sounding method in geocryological mapping [1986, p.144-153, rus] 41-3495
- Slashchilin, O.A.**  
Studying the deformation of freezing ground [1986, p.8-9, rus] 41-1883
- Slavnikov, A.I.**  
Computerized simulation of fleet performance in the Arctic [1985, p.48-53, rus] 41-489
- Slemmer, N.N.**  
Phytocoenotic aspects of photosynthetic activities of steppe plants in eastern Hangay [1986, p.460-473, rus] 41-990
- Sleptsov, A.E.**  
Possibility of using roof-supports made of frozen ice-shingle-gravel mixtures in northern placer mines [1986, p.201-208, rus] 41-2179
- Sletten, R.S.**  
Treatment and disposal of alum and other metallic hydroxide sludges [1987, 40p. + plates, eng] 41-4142
- Smagina, V.M.**  
Preliminary results of microbiological investigations at Mirnyy [1986, p.133-136, rus] 41-1270
- Smart, C.C.**  
Some observations on subglacial ground-water flow [1986, p.224-231, eng] 41-683
- Smayda, T.**  
Temporal chemical variability in acid sensitive high elevation lakes [1986, p.35-44, eng] 41-2617
- Smiraglia, C.**  
Climatic parameters and glacial fluctuations in the period 1950-1982 [1985, p.97-123, ita] 41-3179  
Problems and indications for a new inventory of Italian glaciers based on comparison between the Italian Inventory of 1959-62 and the World Glacier Inventory [1985, p.166-181, ita] 41-3185  
Soviet Glacier Inventory and present glaciation of the Akkem Valley (Altai, Southern Siberia) [1985, p.196-204, ita] 41-3187
- Smirnov, A.G.**  
Strength and filtration properties of water-saturated peats in a detonation zone [1986, p.115-118, rus] 41-906
- Smirnov, A.V.**  
Interrelationships among components of biogeocenoses in southern taiga [1986, 120p., rus] 41-2898
- Smirnov, I.A.B.**  
Methodical and experimental bases of geothermy [1983, 230p. (Pertinent p.79-84, 181-187), rus] 41-4614
- Smirnov, N.P.**  
Water masses and circulation of the southern ocean [1986, 288p., rus] 41-1013
- Smirnov, S.A.**  
Subway construction under severe climatic conditions [1986, p.15-17, rus] 41-1532
- Smirnov, V.D.**  
Erection of residential buildings, without ventilated crawl spaces, in permafrost areas [1983, p.77-81, rus] 41-4477
- Smirnov, V.I.**  
Ice cover and navigation conditions in the Arctic [1986, p.176-178, rus] 41-1665  
Ice distribution in Arctic seas of the North American shelf [1986, p.35-40, rus] 41-4194  
Underground storage of petroleum products in the Far North [1983, p.107-109, rus] 41-520
- Smirnov, V.M.**  
Coastal processes along the west coast of Yamal [1986, p.317-321, eng] 41-3623  
Shore processes in the coastal zone of western Yamal [1986, p.425-428, rus] 41-887
- Smirnov, V.N.**  
Construction of temporary winter roads and ice crossings [1986, p.13-14, rus] 41-914  
Using thermopiles in network construction [1983, p.108-118, rus] 41-4481
- Smith, A.C.**  
Measurement of the speed of sound in ice [1986, p.1713-1715, eng] 41-3071
- Smith, A.M.**  
Ice rumples on Ronne Ice Shelf, Antarctica [1986, p.47-52, eng] 41-800
- Smith, C.A.S.**  
Pedological investigations of Pleistocene glacial drift surfaces in the central Yukon [1986, p.29-37, eng] 41-2704
- Smith, G.A.**  
Lipids of the antarctic sea ice diatom *Nitzschia cylindrus* [1986, p.1649-1653, eng] 41-614
- Smith, I.N.**  
Modelling the response of the West Antarctic Ice Sheet to a climatic warming [1987, p.321-358, eng] 41-3287
- Smith, J.**  
Monitoring of thawing permafrost slopes: interprovincial pipe line [1986, p.133-151, eng] 41-2520
- Smith, J.E.**  
Treatment and disposal of alum and other metallic hydroxide sludges [1987, 40p. + plates, eng] 41-4142
- Smith, J.M.B.**  
Aboveground:belowground phytomass ratios in Venezuelan paramo vegetation and their significance [1985, p.189-198, eng] 41-1229
- Smith, L.H.**  
Use of insulation to provide frost protection for the Waterloo Dam in northern Saskatchewan [1982, p.437-449, eng] 41-3751
- Smith, M.W.**  
Observations of soil freezing and frost heave at Inuvik, Northwest Territories, Canada: Discussion [1986, p.436-438, eng] 41-1929  
Outward flux of vapour from frozen soils at Mayo, Yukon, Canada: results and interpretation [1987, p.143-152, eng] 41-4491  
Stratigraphic, isotopic, and mineralogical evidence for an early Holocene thaw unconformity at Mayo, Yukon Territory [1986, p.794-803, eng] 41-2684
- Smith, O.P.**  
Engineering analysis of beach erosion at Homer Spit, Alaska [1985, 29p. + 5 append., eng] 41-528
- Smith, P.**  
Micropaleontology and sedimentology of the PB borehole series, Prudhoe Bay, Alaska [1986, 62p. + 14 plates, eng] 41-4600
- Smith, P.D.J.**  
Final cleanup at selected (1975-1981) wellsites, sampling and testing of waters and bottom muds in the reserve pits, and the recording of tundra plant responses on the National Petroleum Reserve in Alaska (NPRA). Vol.1 Final well-site cleanup on the National Petroleum Reserve, Alaska [1986, 49p. + append., eng] 41-2450
- Smith, R.E.H.**  
Intracellular photosynthate allocation and the control of Arctic marine ice algal production [1987, p.124-132, eng] 41-3998
- Smith, R.J.**  
Exposure tests at Treat Island [1987, p.48-53, eng] 41-4175
- Smith, S.E.**  
New materials and concepts to reduce energy losses through structural thermal bridges [1986, p.739-750, eng] 41-1387
- Smith, V.R.**  
Bacterial populations in soils of a subantarctic island [1986, p.75-82, eng] 41-501
- Smith, W.O., Jr.**  
Phytoplankton biomass and productivity in the marginal ice zone of the Fram Strait during summer 1984 [1987, p.6777-6786, eng] 41-4237  
Spring distributions of density, nutrients, and phytoplankton biomass in the ice edge zone of the Weddell-Scotia Sea [1987, p.7181-7190, eng] 41-4270
- Smolentsev, I.U.K.**  
Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau [1987, p.4-65, rus] 41-3650
- Smolonogov, E.P.**  
Characteristics of forest resources and their use in the Bilim-baev experimental and model forest [1986, p.3-15, rus] 41-2874
- Smoluchowski, R.**  
Amorphous and porous ices in cometary nuclei [1985, p.397-406, eng] 41-1714  
Ices in planetary rings [1985, p.681-689, eng] 41-1730  
Ices in the solar system; proceedings of the workshop, 1984 [1985, 954p., eng] 41-1693  
Summary of the highlights of the conference [1985, p.859-864, eng] 41-1742
- Smorodin, V.E.**  
Heterogeneous nucleation of ice on aerosol nuclei with modified surfaces [1986, p.119-128, rus] 41-1903
- Smorodin, M.I.**  
Construction of structures and foundations by the grout curtain method [1986, 216p., rus] 41-2886
- Smorygin, G.I.**  
Crystallization of motionless supercooled water [1986, p.16-23, rus] 41-2148  
Metamorphism and thermophysical properties of friable ice [1986, p.106-121, rus] 41-2163  
Methods and equipment for obtaining artificial snow (granulated ice) [1986, p.43-59, rus] 41-2153



- Smyth, M.W.**  
Global ship ice impact forces determined from full-scale tests and analytical modeling of the icebreakers *Canmar Kigoriak* and *Robert LeMeur* [1984, p.253-282, eng] 41-875
- Snellen, J.B.**  
Preliminary measurements of terminal crack velocity in ice [1987, p.233-238, eng] 41-3034
- Sneyd, A.R.**  
M.V. Arctic—opening new frontiers for marine transportation in the Canadian High Arctic [1986, p.747-763, eng] 41-2056
- Sneider, J.B.**  
Continuous spatial and temporal variations of supercooled water during wintertime mountain storms using a passive microwave radiometer [1984, p.47-50, eng] 41-4371  
Spatial and temporal variations of cloud liquid water determined by aircraft and microwave radiometer measurements in northern Colorado orographic storms [1982, p.477-480, eng] 41-61
- Snow cover data, winter 1984-85**  
Snow cover data, winter 1984-85 [1985, 47p., eng] 41-1037
- Snyder, E.F.**  
Activities of the Alaska District, Water Resources Division, U.S. Geological Survey, 1987 [1987, 24p., eng] 41-3338
- Saytko, V.A.**  
Regional landscape-geochemical investigations [1986, 159p., rus] 41-4113
- Sobchenko, M.S.**  
Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia [1986, p.36-41, rus] 41-2918
- Sobik, M.**  
Deflation and nival eolian phenomena observed under conditions of congelation in the forefield of the Werenskiöld Glacier (SW Spitsbergen) [1984, p.197-206, eng] 41-635
- Sobin, G.P.**  
Estimating the deformation of low-loaded structures in the BAM zone [1985, p.28-30, rus] 41-288
- Sobkalov, I.P.**  
Automation and powering of loading-unloading equipment [1986, 128p., rus] 41-2227
- Sobol', S.V.**  
Calculation of permafrost thawing at the bottom of a water reservoir, accounting for settlement [1986, p.102-104, rus] 41-2545  
Ice dams for protecting water areas of northern ports [1987, p.78-80, rus] 41-3652
- Sobolev, S.D.**  
Frost fissures and their importance for soil genesis [1986, p.41-44, eng] 41-993
- Sobolev, V.V.**  
Zones and excitons of cryocrystals [1986, 206p., rus] 41-997
- Sobolevskaya, K.A.**  
Botanical studies in Siberian preservation parks [1986, p.85-88, rus] 41-2458
- Sochanska, W.**  
Integrated model of snowmelt quality for boreal forest sites [1985, p.69-83, eng] 41-1486
- Sochava, V.B.**  
Problems of physical geography and geobotanics. Selected works [1986, 343p., rus] 41-2753
- Société Lacroix**  
Preventive avalanche triggering by helicopter [1986, p.55-60, fre] 41-3358
- Sodhi, D.S.**  
Advances in ice mechanics—1987 [1987, 49p., eng] 41-2929  
Advances in sea ice mechanics in the USA [1987, p.37-49, eng] 41-2933  
Dynamic analysis of failure modes on ice sheets encountering sloping structures [1987, p.281-284, eng] 41-2433  
Sea ice and the Fairway Rock icefoot [1985, p.25-32, eng] 41-337
- Soeda, M.**  
Freezing and thawing resistance of concrete containing chloride [1987, p.901-917, eng] 41-3712  
Strength and freezing-and-thawing resistance of concrete incorporating condensed silica fume [1986, p.1095-1117, eng] 41-1156
- Sofronov, B.I.**  
Characteristics of forest resources and their use in the Bilim-baev experimental and model forest [1986, p.3-15, rus] 41-2874
- Solainen, R.**  
Use of cold formed structural hollow sections and PE-coated steel pipes in the Arctic [1986, p.970-987, eng] 41-1141
- Sokolov, A.A.**  
Water problems on the threshold of the twenty-first century [1986, 166p. (pertinent p.146-151), rus] 41-2228
- Sokolov, A.M.**  
Allowing for variations in electromagnetic surveys of the Arctic Basin [1978, p.83-92, rus] 41-999
- Sokolov, A.O.**  
Evaluation of cold resistance of shipbuilding steels using methods of mathematical statistics [1987, p.42-43, rus] 41-2787
- Sokolov, A.V.**  
Calculating vertical shift of narrow, filled-up piers, allowing for ice-bearing cores [1986, p.34-42, rus] 41-2909
- Sokolov, B.L.**  
Characteristics of naled fields [1986, p.138-147, rus] 41-123  
Ice cover and winter runoff of rivers in the eastern part of the BAM zone [1986, p.11-33, rus] 41-422  
Possible changes in river drainage in permafrost zones when the ground water regime is disturbed [1986, p.3-11, rus] 41-421
- Sokolov, D.P.**  
Pulsed fluctuations of water level in glacial rivers [1986, p.99-103, rus] 41-2722
- Sokolov, I.A.**  
Pale yellow soils of the central Siberian Plateau [1986, p.25-38, rus] 41-3083
- Sokolov, L.G.**  
Selection of architectural and structural types and technical-economic analyses of timber-transporting ships [1984, p.29-37, rus] 41-542
- Sokolov, L.K.**  
Studying the influence of cutting speed and cutting-tool parameters on frozen ground excavation [1978, p.53-55, rus] 41-1321  
Studying the process of frozen ground excavation by cutting blades of a continuous action trenching machine [1978, p.57-63, rus] 41-1322
- Sokolov, M.**  
Formation of loads on underground structures in thawing disperse ground [1986, p.24-25, rus] 41-3735
- Sokolov, S.V.**  
Lift-slab method of erecting a 30-story building in Krasnoyarsk [1986, p.14-16, rus] 41-888
- Sokolov, V.E.**  
All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports [1986, 154p., rus] 41-3539  
All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks, Novosibirsk, Aug. 26-28, 1986. Summaries [1986, 165p., rus] 41-2456  
Kologriv forest (ecological investigations) [1986, 126p., rus] 41-2345
- Sokolova, M.V.**  
Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae—Leguminosae. Part 2. Family Leguminosae [1986, 188p., rus] 41-2361
- Soliman, M.H.**  
Temperature distribution in composite bridges [1987, p.475-482, eng] 41-2485
- Soloboeva, L.A.**  
Regime-forming factors in ground water formation in the southern Tyumen' Region [1987, p.131-136, rus] 41-3651
- Solodkov, P.A.**  
Mapping of territories with unstable snow covers [1986, p.82-84, rus] 41-1687  
Results of studying mass balance of Golubin Glacier in 1972-1981 [1986, p.98-102, rus] 41-780
- Solomatina, V.I.**  
Lithogenesis of ground ice [1986, 216p., rus] 41-1342
- Solomatov, V.I.**  
Concrete with A.C.F. admixture for transportation engineering [1986, 63p., rus] 41-3803  
Interaction of polymer admixtures with cements in concretes [1986, p.59-62, rus] 41-2756
- Solomina, O.N.**  
Dendroindication of climatic conditions of mountain glacier existence in the Chon-Kyzyl-Su valley during the last 600 years [1986, p.106-112, rus] 41-1648  
Reconstruction of environmental conditions of the north slope glaciers of the Terskey Ala-Tau Range from dendrologic data [1987, p.235-242, rus] 41-4153
- Solomon, S.I.**  
Attempting flow forecasts of the Indus River, Pakistan using remotely sensed snow cover data [1986, p.171-184, eng] 41-4317
- Sommavilla, F.**  
Technico-economical aspects relating to the use of elastic snow-halting barriers [1986, p.44-55, ita] 41-2237
- Sommerfeld, R.A.**  
Preliminary measurements of SO<sub>2</sub> adsorbed on ice [1986, p.349-351, eng] 41-865
- Soniasy, R.N.**  
Lagoon treatment of municipal sewage effluent in a subarctic region of Canada (Yellowknife, N.W.T.) [1986, p.129-139, eng] 41-350
- Sonnichsen, G.V.**  
Small boat seismic reflection survey of the Loughheed Island Basin-Cameron Island Rise-Desbarats Strait region of the Arctic Island channels using open water leads [1987, p.877-882, eng] 41-4015
- Sonnier, J.**  
Forest and avalanches [1985, p.53-58, fre] 41-864  
Restoration of mountain soils, more than a century old activity [1986, p.25-38, fre] 41-871
- Soo, S.**  
Analysis of frozen sand beams [1983, p.790-793, eng] 41-2687  
Finite element method for analysis of frozen earth structures [1987, p.121-129, eng] 41-4489  
Flexural behavior of frozen soil [1986, p.355-361, eng] 41-1161  
Studies of plain and reinforced frozen soil structures [1984, 299p., eng] 41-984
- SooHoo, J.B.**  
Effects of four environmental variables on photosynthesis-irradiance relationships in antarctic sea-ice microalgae [1987, p.299-306, eng] 41-3146  
Influence of sea ice and sea ice biota on downwelling irradiance and spectral composition of light in McMurdo Sound [1984, p.159-165, eng] 41-1280
- Soranzo, M.**  
Criteria for scaling rock and avalanche defense structures [1986, 146p., ita] 41-2568
- Sorg, N.**  
Measurement of the extinction of water ice particles [1985, p.149-154, eng] 41-1702
- Sorkin, E.L.**  
Automatic low-temperature calorimeter [1986, p.1456-1459, eng] 41-995
- Sorokin, N.D.**  
Microbiocenoses and biologic activity in forest soils of the Angara-Yenisey region [1985, p.35-47, rus] 41-4110
- Sorokin, V.A.**  
Determination of the deformation characteristics of permafrost by the method of probe thawing [1987, p.248-251, eng] 41-4166
- Sorokina, T.A.**  
Pseudomonas bacteria from an antarctic glacial ice sheet [1987, p.288-297, eng] 41-4610  
Pseudomonas genus of bacteria isolated from Antarctic ice sheets [1986, p.494-504, rus] 41-1824
- Sorotkina, M.M.**  
Behavior of the Medvezhiy glacier during 1982-1984 [1986, p.99-106, rus] 41-1647  
Calculating bottom relief of the active part of the Medvezhiy glacier [1986, p.195-201, rus] 41-134
- Sorour, M.M.**  
Formation and melting of a vertical ice slab in an enclosure [1987, p.167-177, eng] 41-2882
- Sosiak, N.V.**  
Industrialization of the construction of electric substations in difficultly accessible areas of the Far North [1986, p.2-3, rus] 41-908
- Sosnovskii, A.V.**  
Experiments with desalting brines [1986, p.208-214, rus] 41-2180  
Remarks on G.I. Smorygin's book titled "Theoretical basis for obtaining loose-structure ice" [1986, p.231-234, rus] 41-141  
Theory and practice of the spray-cone ice formation technique [1986, p.60-66, rus] 41-2154  
Wind velocity effect on the process of ice formation in a sprinkler cone [1986, p.225-230, rus] 41-140
- Sotin, C.**  
Creep of high-pressure ice VI [1985, p.109-118, eng] 41-1700
- Sotnikov, S.N.**  
Design and erection of foundations in the close vicinity of existing structures. Construction experience in the north-western USSR [1986, 95p., rus] 41-2911
- Sotnikov, N.A.**  
Substations 110/6-10 kv built in the Urengoy gas field area [1986, p.6-7, rus] 41-910
- Soulage, R.G.**  
Ice deposit characteristics versus meteorological parameters from mountain top measurements and comparisons with a numerical investigation [1984, p.733-736, eng] 41-4414  
Role of ice crystals on ice accretion processes [1984, p.737-740, eng] 41-4415  
Secondary ice multiplication by "splintering" in low stratocumulus clouds [1984, p.195-198, eng] 41-4391
- Sovershaev, V.A.**  
Geographic studies of coastal zones of Arctic seas [1986, p.5-7, rus] 41-4061
- Sovesbchanie geografov Sibiri i Dal'nego Vostoka o roli geografii v uskorenii nauchno-tekhnicheskogo progressa, 8th, Irkutsk, 1987**  
Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2 [1986, 166p., rus] 41-4060  
Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.1 [1986, 166p., rus] 41-3982
- Sovetskaya antarkticheskaya ekspeditsiya**  
Twenty-fourth Soviet Antarctic Expedition. General description of studies of the 1978/79 season, with research results [1986, 139p., rus] 41-1265

- Soviet glaciological studies on the eastern ice field in 1984-1985**  
Soviet glaciological studies on the eastern ice field in 1984-1985 [1986, p.10-16, rus] 41-1633
- Sozonik, V.V.**  
Computerized forecasting of cryogenic processes [1985, p.112, rus] 41-332
- Sparboom, U.**  
Ice research and problems of hydraulic construction in cold regions [1984, p.1511-1513, ger] 41-2256
- Speck, R.C.**  
Laboratory creep tests of frozen gravels [1986, p.101-104, eng] 41-1309
- Speck, R.S.**  
Drift snow loads on multilevel roofs [1984, p.14-25, eng] 41-1943
- Speck, R.S., Jr.**  
Analysis of snow loads due to drifting on multilevel roofs [1985, p.157-170, eng] 41-1492
- Speedy, R.J.**  
Melting temperature of ice at positive and negative pressures [1987, p.3069-3072, eng] 41-4126
- Spencer, D.J.**  
Laboratory investigation of lightweight heater tape for shuttle propellant tank [1986, 51p., eng] 41-2070
- Spencer, J.R.**  
Icy Galilean satellite reflectance spectra: less ice on Ganymede and Callisto? [1987, p.99-110, eng] 41-3964
- Spencer, M.J.**  
Seasonal and spatial trends in south Greenland snow chemistry [1987, p.863-869, eng] 41-3890
- Snow chemistry from Xixabangma Peak, Tibet [1986, p.542-543, eng] 41-4312**
- Spencer, P.A.**  
*In situ* measurement of visco-elastic properties of flooded ice and spray ice using flatjacks [1987, p.17-23, eng] 41-2397
- MV Robert LeMour ice/propeller interaction project: full-scale data [1986, p.301-319, eng] 41-2285**
- Spies, A.**  
Phytoplankton in the marginal ice zone of the Greenland Sea during summer, 1984 [1987, p.195-205, eng] 41-3684
- Spindler, M.**  
Biogenic and mineral inclusions in a green iceberg from the Weddell Sea, Antarctica [1987, p.31-33, eng] 41-1975
- Spiridonov, I.U.G.**  
Determining the velocity of sea-surface wind from radar data of the *KOSMOS-1500* satellite [1987, p.3-11, rus] 41-4620
- Methods of compiling general radar maps of polar regions [1986, p.58-63, rus] 41-2717**
- Spiridonov, V.V.**  
Using thermopiles in cooling plastic frozen ground [1983, p.94-107, rus] 41-4480
- Spletstoeser, J.**  
Polar research [1987, p.49-50, eng] 41-3956
- Polar research [1986, p.47-49, eng] 41-3955**
- Spring, E.**  
Studies of the mechanical properties of cross-country skis [1986, 24p., eng] 41-3802
- Spring, U.**  
Isotopic fractionation at the base of polar and sub-polar glaciers [1986, p.475-485, eng] 41-4303
- Spyridakis, D.E.**  
Temporal chemical variability in acid sensitive high elevation lakes [1986, p.35-44, eng] 41-2617
- Squire, V.**  
Shuttle Imaging Radar B (SIR-B) Weddell Sea ice observations: a comparison of SIR-B and scanning multichannel microwave radiometer ice concentrations [1987, p.7173-7179, eng] 41-4269
- Squire, V.A.**  
Moving loads on sea ice [1987, p.569-575, eng] 41-3855
- Wind over ice: a mechanism for the generation of ice-coupled waves [1986, p.115-128, eng] 41-1587**
- Srivastava, S.K.**  
Remote sensing of icebergs by ground-wave Doppler radar [1986, p.276-284, eng] 41-1510
- SSDC/MAT—an international operation**  
SSDC/MAT—an international operation [1987, p.3-5, eng] 41-2319
- St. Clair, L.L.**  
Lichen distribution along an alpine tundra ridge in the High Uintas of northeastern Utah, U.S.A. [1985, 155p., eng] 41-3797
- St. John, J.W.**  
Analysis of extreme ice loads measured on USCGC *Polar Sea* [1984, p.241-252, eng] 41-874
- St. Lawrence, W.**  
Thermal ice drill for profiling thick multiyear ice [1987, p.1-11, eng] 41-4211
- St-Onge, D.A.**  
Morphosedimentary zones in the Bluenose Lake region, District of Mackenzie [1987, p.89-100, eng] 41-4010
- Stabnikov, N.V.**  
Stresses in impervious screens induced by waves and adhered ice [1985, p.33-38, rus] 41-432
- Stacey, R.A.**  
Review of interaction of icebergs with offshore structures [1985, p.693-704, eng] 41-668
- Stafeev, P.F.**  
Late-fall loosening of ground as a method in thermal melioration [1986, p.4-5, rus] 41-1886
- Staines, M.P.**  
*In situ* measurements of the resistivity of antarctic sea ice [1986, p.285-290, eng] 41-1295
- Stakanov, V.D.**  
Dynamics and hydrophysical properties of forest litter in the Krasnoyarsk forest steppes [1986, p.172-176, rus] 41-816
- Staley, C.**  
On the Yukon and Tanana: river trip was "no picnic" [1985, p.8-9, eng] 41-1837
- Stankowski, W.**  
Evolution of marginal zone of the Vitkovski Glacier (South Spitsbergen) [1985, p.527-535, eng] 41-75
- Stanley, R.L.**  
Performance of soil-aggregate-fabric systems in frost-susceptible roads, Lincoln County, Iowa [1981, p.6-14, eng] 41-1038
- Stanton, T.K.**  
Acoustical reflection and scattering from the underside of laboratory grown sea ice: measurements and predictions [1986, p.1486-1494, eng] 41-3068
- Staples, B.R.**  
Pitzer-Debye-Hückel limiting slopes for water from 0 to 350 °C and from saturation to 1 kbar [1986, p.749-764, eng] 41-1553
- Starosolszky, O.**  
Ice and river engineering [1985, p.175-219, eng] 41-902
- Starshinov, V.A.**  
Towing gear of arctic icebreakers [1985, p.14-16, rus] 41-3351
- Stashenko, A.I.**  
Changes in geocryological conditions with exploitation of natural forested complexes in the south of central Yakutia [1986, p.194-199, eng] 41-3199
- Possibilities of landscape indication in engineering-geological surveys of southern Central Yakutia [1986, p.85-96, rus] 41-3489**
- Some aspects of the landscape approach to forecasting cryogenic processes [1986, p.191-199, rus] 41-2840**
- State-of-the-art report on offshore concrete structures for the Arctic**  
State-of-the-art report on offshore concrete structures for the Arctic [1986, 117p., eng] 41-3787
- Stauffer, B.**  
Composition of ancient atmosphere, based on ice-core analyses [1985, p.72-73, eng] 41-2632
- Review of the history of atmospheric CO<sub>2</sub> recorded in ice cores [1986, p.89-108, eng] 41-2221**
- Stearman, R.L.**  
Problems of chemical defence operations in extreme cold [1985, 46p. + 2 appends., eng] 41-477
- Stearns, C.R.**  
Antarctic automatic weather station data for the calendar year 1985 [1986, 24p., eng] 41-877
- United States Antarctic Research Program automatic weather station project [1986, p.5-12, eng] 41-1072**
- Stebliankov, V.I.**  
Detectors of icing on overhead power lines [1987, p.49-51, rus] 41-3612
- Steele, H.M.**  
Formation of polar stratospheric clouds [1983, p.2055-2067, eng] 41-2004
- Steele, M.**  
Ice-seawater turbulent boundary layer interaction with melting or freezing [1986, p.1829-1846, eng] 41-2219
- Steels for heavy-duty marine and offshore use**  
Steels for heavy-duty marine and offshore use [1986, p.34-36, eng] 41-90
- Steen, J.W.**  
Dome-Canmar's operational ice-forecasting system for the Beaufort Sea [1986, p.615-650, eng] 41-170
- Steenhuis, T.S.**  
Heat and moisture transfer in a partly frozen nonheaving soil [1986, p.1114-1122, eng] 41-2474
- Steer, P.**  
Monte Carlo simulation of snow depth in a forest [1986, p.864-868, eng] 41-445
- Simulation of snow depth in a forest [1985, p.44-54, eng] 41-1483**
- Steffen, K.**  
Fractures in arctic winter pack ice (North Water, northern Baffin Bay) [1987, p.211-214, eng] 41-4460
- Ice conditions of an arctic polynya: North Water in winter [1986, p.383-390, eng] 41-4293**
- Steffensen, J.-P.**  
Least squares method used in reduction of data from theodolite measurements on fast moving glaciers [1986, p.42-46, eng] 41-736
- Steffensen, M.**  
Investigation of the use of TOVS-data in polar low research [1986, p.119-129, eng] 41-1802
- Stegen, G.R.**  
Comments on *A heat balance for the Bering Sea ice edge* [1986, p.2205-2208, eng] 41-2843
- Stebno, G.**  
Problem of the resistance of concrete surfaces to salting [1985, p.59-63, ger] 41-391
- Stein, J.**  
Elaboration of two methods to investigate unfrozen water movement in a snow-soil environment [1987, 310p., eng] 41-3798
- Integrated model of snowmelt quality for boreal forest sites [1985, p.69-83, eng] 41-1486**
- Plot measurements of snowmelt runoff for varying soil conditions [1984, p.123-135, eng] 41-3320**
- Stenström, G.**  
High resolution pulse doppler radar for detection of small icebergs in Arctic sea routes [1986, p.358-363, eng] 41-1106
- Stepaniuk, I.A.**  
Nonthermal radio-frequency emission from intensely deforming ice covers of natural bodies of water [1984, p.441-448, eng] 41-819
- Stepanov, A.M.**  
Estimating chemical composition of vegetation, soils and natural waters in the central and southern taiga [1986, p.64-72, rus] 41-2347
- Stepanov, B.S.**  
Glacial floods and their control [1986, p.104-108, 216-219, rus] 41-4351
- Stepanov, G.V.**  
Results of size distribution study of natural ice-forming nuclei using a universal cascade aerosol sampler [1986, p.55-63, rus] 41-3671
- Size dependence of natural aerosol for ice nucleation [1986, p.28-32, rus] 41-2879**
- Stepanova, L.E.**  
Quantitative evaluation of the role of near-shore ice in shoreline modification in the Okhotsk Sea [1985, p.90-98, rus] 41-1909
- Stephens, W.S., III**  
Electric heater-blower apparatus for removing frost and snow from vehicle windows [1982, 6 col., eng] 41-1996
- Stephenson, R.L.**  
Relationship between winter lake cover, radiation receipts and the oxygen deficit in temperate lakes [1986, p.386-403, eng] 41-4536
- Stephenson, S.N.**  
Antarctic ice-shelf boundaries and elevations from satellite radar altimetry [1987, p.229-235, eng] 41-4465
- Ice stream-ice shelf interaction in West Antarctica [1987, p.161-180, eng] 41-3279**
- Stevenson, D.J.**  
Evolution of Titan's coupled ocean-atmosphere system and interaction of ocean with bedrock [1985, p.741-757, eng] 41-1735
- Stevens, H.K.**  
Small-scale projectile penetration in saline ice [1986, p.415-438, eng] 41-2668
- Stewart, K.M.**  
Hypersaline gradients in two Canadian High Arctic lakes [1986, p.1795-1803, eng] 41-1222
- Stewart, R.A.**  
Loading of a large diamicton mass in glacial Lake Maumee III sediments, southwestern Ontario [1987, p.844-849, eng] 41-4082
- Stewart, R.E.**  
Deep OC isothermal layers within precipitation bands [1982, p.570-571, eng] 41-69
- Hail to rain conversion through melting [1984, p.275-278, eng] 41-4399**
- Laboratory simulations of graupel growth [1984, p.163-166, eng] 41-4382**
- Mesoscale circulations initiated by melting snow [1986, p.13,299-13,302, eng] 41-1026**
- On the tendency and motion of a rain/snow boundary [1987, p.343-350, eng] 41-2651**
- Stewart, W.P.**  
Arctic drilling/production unit anchored by tendons [1986, p.26-28, eng] 41-1223
- Steyn-Ross, D.A.**  
Ground-based system for sensing radiometric properties of snow, ice, and water [1986, p.971-980, eng] 41-3992
- Stickel, P.G.**  
High altitude tropical cirrus cloud observations [1982, p.215-217, eng] 41-19
- Observation of ice aggregation at temperatures near -50 °C [1982, p.226-229, eng] 41-22**
- Stikhin, I.V.**  
Some features of providing heat supply to thermal power stations being built in regions of temperate and cold climate [1986, p.421-422, eng] 41-1160
- Stirbys, A.F.**  
Incursion of Alaskan multiyear ice features and their associated scours in the Canadian Beaufort Sea [1986, p.51-59, eng] 41-3091
- Towards repetitive mapping of ice scours in the Beaufort Sea [1986, p.284-286, eng] 41-3120**
- Stockel, R.F.**  
Method of preparing snow and ice control compositions [1983, 6 col., eng] 41-1776

- Stogryn, A.**  
Analysis of the tensor dielectric constant of sea ice at microwave frequencies [1987, p.147-158, eng] 41-3315  
Strong fluctuation theory for moist granular media [1985, p.78-83, eng] 41-2322
- Stoljanov, S.**  
Influence of the complex permittivity of the water on radar studies of convective clouds [1984, p.793-796, eng] 41-4420
- Stojanovic, S.D.**  
Free boundary problems [1986, 93p., eng] 41-2642
- Stoliarov, A.M.**  
Economic efficiency of using ice pillars for roof control in northern placer mines [1986, p.38-47, rus] 41-4554
- Stolle, D.F.E.**  
Determination of particle paths using the finite-element method [1986, p.219-223, eng] 41-681  
Finite-element simulation of the thermal regime of the Erebus Glacier Tongue, Antarctica [1986, p.530-534, eng] 41-4309
- Stoss, K.**  
Influence of freezing on strata behavior [1985, p.1438-1444, eng] 41-858
- Stössel, A.**  
Thermodynamic calculations of ice production in the northern Baltic proper [1985, p.261-284, eng] 41-485
- Stötter, J.**  
Glacial and periglacial investigations in Skidadalum, Tröllasag, Northern Iceland [1986, p.1-18, eng] 41-1788
- Strauss, W.**  
Avalanche [1985, p.26-27, eng] 41-1838
- Strazzulla, G.**  
Interaction between solar energetic particles and interplanetary grains [1985, p.273-285, eng] 41-1707
- Streitova, V.S.**  
Thermal regime of cryogenic soils during basic improvement of meadows [1985, p.14-26, rus] 41-255
- Streshneva, N.P.**  
Distribution regularities of mudflow foci in the Chechen-Igash ASSR [1985, p.46-58, rus] 41-844
- Stringer, W.J.**  
Mesoscale nowcasting of sea ice movement through the Bering Strait with a description of major driving forces [1987, p.193-207, eng] 41-3079
- Stromillo, N.N.**  
First time above the North Pole [1986, 134p., rus] 41-3014
- Strong, L.L.**  
Mapping permafrost in the boreal forest with thematic mapper satellite data [1986, p.1513-1520, eng] 41-3472
- Struchkov, O.A.**  
Improving the ultra-high frequency technique of groove-sampling in northern mines [1986, p.10-15, rus] 41-4549
- Strukov, B.B.**  
Methods of measuring avalanche velocity using laser range finders [1985, p.15-22, rus] 41-839
- Stubbs, J.T.**  
Arctic marine technology: state of the art and prospects for the 1990's [1986, p.220-243, eng] 41-2029
- Study of sea-spray icing of communications antennas—exploratory (NSAP project Q-5-79)**  
Study of sea-spray icing of communications antennas—exploratory (NSAP project Q-5-79) [1981, 43p. + append., eng] 41-4636
- Stuefflotten, S.**  
Low temperature excess loss of loose tube fiber cables [1982, p.4300-4307, eng] 41-263
- Stulver, M.**  
Land-ice/sea-ice transition in Ross Ice Shelf ice at J-9, Antarctica [1985, p.66-68, eng] 41-2628  
Radiocarbon chronology of the last glaciation in McMurdo Sound, Antarctica [1985, p.59-61, eng] 41-2625  
Ross Ice Shelf oxygen isotopes and west antarctic climate history [1986, p.49-67, eng] 41-612
- Stupich, T.F.**  
Cold regions operation of diesel vehicles with special consideration for the M113A1 armored personnel carrier [1987, 45p. + append., eng] 41-4637  
Cold starting ability of in-service M113 vehicles [1986, 17p. + append., eng] 41-3010  
Improving low temperature startability of M113 vehicles: automatic engine cycling tests [1987, 23p. + append., eng] 41-3813
- Sturges, D.L.**  
Snow depth and incidence of a snowmold disease on mountain big sagebrush [1986, p.215-221, eng] 41-3571
- Sturm, M.**  
Effects of the 1966-68 eruptions of Mount Redoubt on the flow of Drift Glacier, Alaska, U.S.A. [1986, p.355-362, eng] 41-4288
- Sturup, V.**  
Evaluation and prediction of concrete durability—Ontario Hydro's experience [1987, p.1121-1154, eng] 41-3721
- Styron, B.K.**  
Lowering piles into holes drilled with fire-jet drills in permafrost (the case of northern Tyumen' region) [1986, p.8-10, rus] 41-4615
- Stytsink, V.V.**  
Ice loads on power lines in windy weather [1985, p.100-107, rus] 41-1545
- Subsea permafrost: summary of discussion and research needs**  
Subsea permafrost: summary of discussion and research needs [1986, p.48-49, eng] 41-2513
- Sada, T.**  
Repair of pavement in tunnels (using precast reinforced concrete slabs) [1987, p.719-733, eng] 41-4041
- Sudakov, V.B.**  
Concretes for high dams [1985, 101p., rus] 41-413  
Concretes with polyfunctional admixtures [1985, p.13-17, rus] 41-416  
Experimental application of rolled concrete mixtures at the construction site of the Bureya hydroelectric power plant in freezing weather [1987, p.8-12, rus] 41-2798  
Methods of estimating the efficiency of new surface-active additives [1985, p.3-9, rus] 41-414  
New compound admixture for highly frost-resistant poured concretes [1986, p.15-16, rus] 41-879
- Suenaga, E.**  
Experimental study on permeability coefficient of sea ice [1986, p.237-246, eng] 41-1595
- Suetova, I.A.**  
Area of Antarctica and its ice shelves (on the basis of new cartographic data) [1986, p.213-226, eng] 41-3201  
New evaluation of the average height, volume and thickness of the antarctic ice sheet [1986, p.217-220, rus] 41-2551
- Sugawara, M.**  
Melting of horizontal ice layer from above by combined effect of temperature and concentration of aqua-solvent [1987, p.227-232, eng] 41-3963  
Method of automatic calibration of the tank model (fifth report)—automatic or semi-automatic procedures to calibrate the multiplication factor of the precipitation in snowy basins [1987, p.87-113, jpn] 41-4003
- Sugawara, N.**  
On the role of water film in the mechanism of flashover of ice insulators [1986, p.281-284, eng] 41-3416
- Sugden, D.E.**  
Evidence for two zones of debris entrainment beneath the Greenland ice sheet [1987, p.238-241, eng] 41-4227  
Glacial lake drainage near Søndre Strømfjord, West Greenland [1986, p.304, eng] 41-692
- Sugiyama, M.**  
Durability of concrete containing a shrinkage reducing admixture [1987, p.1103-1119, eng] 41-3720
- Suhmeyer, L.**  
Operating experiences with the *Polarstern* in Antarctica [1986, p.548-562, eng] 41-2045
- Sukacheva, V.N.**  
Development of swamps and paludal forests in western Siberia [1986, p.26-29, rus] 41-3743
- Sukhachev, A.I.**  
Using byproducts of iron ore concentration in construction materials produced for the North [1986, 176p., rus] 41-2214
- Sukhanova, N.I.**  
Estimating chemical composition of vegetation, soils and natural waters in the central and southern taiga [1986, p.64-72, rus] 41-2347
- Sukhodol'skii, S.E.**  
Classifier of cryogenic rock-heave [1986, p.97-103, rus] 41-2825
- Sukhodrovskii, V.L.**  
Methods of studying cryogenic relief-forming processes at research stations [1986, p.111-119, rus] 41-1199  
Methods of studying cryogenic slope processes at research stations [1986, p.120-129, rus] 41-1200  
Underground ice in western Siberia: origin and geological significance [1986, p.173-183, eng] 41-3197
- Sukhorukov, K.K.**  
Laboratory investigation of the melting of ice by induced convection [1986, p.94-96, eng] 41-3682
- Sukhov, A.G.**  
Allowing for the most recent tectonics in geocryological mapping of western Siberia [1986, p.67-78, rus] 41-3487  
Influence of neotectonics on the development of cryogenic formations [1986, p.103-115, rus] 41-2826  
Positive forms of mesorelief as the result of ground ice formation [1986, p.296-302, eng] 41-3620  
Positive microrrelief forms as a result of underground ice formation [1986, p.84-88, rus] 41-110
- Sukhov, I.I.**  
Determining the parameters of ripper-tooth extensions [1978, p.14-20, rus] 41-1313  
Probability analysis of variations in the resistance of frozen ground to ripping [1978, p.20-25, rus] 41-1314
- Sukhovel, V.F.**  
Seas of the World Ocean [1986, 288p., rus] 41-556
- Sukselainen, I.J.**  
Current problems in arctic vessel research [1986, p.41-65, eng] 41-2023
- Sukselainen, J.**  
Prospects for the development of shipbuilding techniques from studying research data [1985, p.36-39, rus] 41-1517
- Sullivan, C.W.**  
Effects of four environmental variables on photosynthesis-irradiance relationships in antarctic sea-ice microalgae [1987, p.299-306, eng] 41-3146  
Ice nucleation activity of antarctic marine microorganisms [1985, p.126-128, eng] 41-2955  
Influence of sea ice and sea ice biota on downwelling irradiance and spectral composition of light in McMurdo Sound [1984, p.159-165, eng] 41-1280  
Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover [1987, p.153-164, eng] 41-3131  
Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microalgal communities [1987, p.165-173, eng] 41-3132  
Sea ice microbial communities. 8. Bacterial production in annual sea ice of McMurdo Sound, Antarctica [1987, p.175-186, eng] 41-3133
- Summers, C.**  
Sedimentary deposits in the northern lowland plains, Mars [1986, p.E166-E174, eng] 41-3749
- Sundararajan, A.**  
Simulation of a multi-seam dragline operation in a sub-arctic mine [1986, p.47-54, eng] 41-1027
- Sunder, S.S.**  
Integrated constitutive theory for the mechanical behaviour of sea ice: micromechanical interpretation [1986, p.87-102, eng] 41-1585  
Numerical modelling of ice-structure interaction [1986, p.431-444, eng] 41-1610  
Tensile fracture model for ice [1987, p.225-233, eng] 41-2425
- Suonio, V.**  
Introduction [1986, p.32-34, eng] 41-2486
- Super, A.B.**  
Further exploratory analysis of the Bridger Range winter cloud seeding experiment [1986, p.1926-1933, eng] 41-4057  
Liquid water limitation to ice particle growth in Montana cumulus congestus clouds [1982, p.350-353, eng] 41-32
- Suprenant, B.A.**  
Evaluating mix designs for cold weather concreting [1987, p.49-57, eng] 41-2767
- Suri, S.K.**  
Freezing temperatures of aqueous solutions of methyl formate and ethyl acetate with a variety of nonelectrolytes. Gibbs energy of interaction of the ester group with other functional groups [1986, p.705-715, eng] 41-1552
- Sarova, T.G.**  
Glacioclimatic conditions in the European Arctic in the Late Holocene [1986, p.149-154, rus] 41-124  
Spore and pollen distribution in snow on the southern slope of El'brus Mountain [1986, p.113-115, rus] 41-1649
- Sushchenia, V.A.**  
Vegetation changes in the Samotlor swamp (West Siberia) under the influence of engineering projects [1982, p.198-209, eng] 41-2344
- Sushkov, N.M.**  
Observation and calculation of snow cover characteristics in agricultural fields at different snow-retention methods [1986, p.22-37, rus] 41-3585
- Suslov, V.F.**  
Glaciology of mountainous regions [1986, 136p., rus] 41-769  
Mass balance and trends in glacier changes in the USSR [1986, p.43-599, rus] 41-775  
Mass balance of Central Asia glaciers and its relation to river runoff [1986, p.56-59, 170-173, rus] 41-4340
- Sutcliffe, P.**  
Close range ice hazard detection: Phase 2 [1987, 67p. + append., (2 vols.), eng] 41-3226
- Suyama, T.**  
Recycling of pavement *in-situ* in Japan [1987, p.867-892, eng] 41-4046
- Suzuki, K.**  
Comparison of the surface conditions of the inland ice sheet, Dronning Maud Land, Antarctica, derived from NOAA AVHRR data with ground observation [1987, p.72-75, eng] 41-4458  
Spatial distribution of chloride and sulfate in the snow cover in Sapporo, Japan [1987, p.1773-1778, eng] 41-4539
- Suzuki, M.**  
Stream water temperature observations in Langtang Khola, Nepal Himalayas [1987, p.25-28, eng] 41-3911
- Suzuki, Y.**  
Development of an ice core drill for liquid-filled holes [1986, p.86-92, eng] 41-3662  
Studies of the behavior of a snow cover on mountain slope. 21. Stress in the snow cover with wavy surface lying on a plane slope [1986, p.27-36, jpn] 41-3877
- Svazic, M.**  
Polyethylene-modified bitumen for paving applications [1986, p.2685-2704, eng] 41-829
- Svensson, E.C.**  
Structure of high-density amorphous ice by neutron diffraction [1986, p.3062-3064, eng] 41-2240

- Svensson, H.**  
Permafrost. Some morphoclimatic aspects of periglacial features of northern Scandinavia [1986, p.123-130, eng] 41-1870
- Sveshnikov, A.M.**  
Influence of atmospheric circulation on the formation of Weddell polynya [1986, p.52-56, rus] 41-4187
- Swamidass, A.S.J.**  
Analysis of gravity platform foundations using F.E.M. with stochastic materials [1986, p.127-135, eng] 41-358  
Response of offshore structures to berg-bit and iceberg impacts [1985, p.951-961, eng] 41-671
- Swanson, R.H.**  
Forest hydrology and watershed management [1987, 625p., eng] 41-4313  
Snow distribution patterns in clearings and adjacent forest [1986, p.1931-1940, eng] 41-2466
- Swaenagen, J.C.**  
Thick ice penetrator [1986, p.495-520, eng] 41-2674
- Sweda, T.**  
Dendrochronologies of San Rafael and Soler areas, Patagonia [1987, p.125-132, eng] 41-3837  
Recent retreat of Soler Glacier, Patagonia as seen from vegetation recovery [1987, p.119-124, eng] 41-3836
- Swets, D.H.**  
Salting practices—trends and issues [1978, p.128-132, eng] 41-381
- Swett, K.**  
Terrace scarp deflation as a renewable source for eolian sediments in an arctic periglacial setting [1987, p.45-52, eng] 41-4224
- Swift, C.T.**  
Microwave radiometer weather-correcting sea ice algorithm [1987, p.6521-6534, eng] 41-3643  
Passive microwave spectral emission from saline ice at C-band during the growth phase [1986, p.840-848, eng] 41-2298
- Swiss, J.J.**  
Oil in ice computer simulation model [1986, p.41-46, eng] 41-343
- Swisler, T.J.**  
Formation of polar stratospheric clouds [1983, p.2055-2067, eng] 41-2004
- Swishbank, C.**  
Multispectral digital image mapping of antarctic ice features [1986, p.159-163, eng] 41-761
- Swoboda, G.D.**  
Experimental and theoretical studies of ice crystal habit development [1982, p.329-332, eng] 41-26
- Symonds, G.**  
Air-sea heat flux and the seasonal distribution of sea ice over the North East Newfoundland Shelf [1986, p.88-114, eng] 41-146  
Proceedings [1986, 668p., eng] 41-142  
Seasonal ice extent on the northeast Newfoundland Shelf [1986, p.10,718-10,724, eng] 41-1011
- Symposium on Composites for Extreme Environments, Bal Harbour, FL, Nov. 11, 1980**  
Composites for extreme environments [1982, 179p., eng] 41-1987
- Symposium on Glacier Mapping and Surveying, Reykjavik, Aug. 26-29, 1985**  
Proceedings [1986, 216p., eng] 41-727
- Symposium on Remote Sensing in Glaciology, 2nd, Cambridge, Sep. 1986**  
Proceedings [1987, 264p., eng] 41-4425
- Symposium on Unbound Aggregates in Roads, Apr. 7-8, 1981**  
Proceedings [1981, 207p., eng] 41-2923
- Symposium on Water Damage of Asphalt Pavements: Its Effect and Prevention, Williamsburg, VA, Dec. 1984**  
Evaluation and prevention of water damage to asphalt pavement materials [1985, 154p., eng] 41-3332
- Sypacher, G.G.**  
Some features of providing heat supply to thermal power stations being built in regions of temperate and cold climate [1986, p.421-422, eng] 41-4160
- Syrokoski, I.U.V.**  
Measuring instruments IPG-3 and IDMG-1 for frost heaving of ground [1985, p.105, rus] 41-327
- Sysnev, V.V.**  
Modeling of processes in landscape-geochemical systems [1986, 301p., rus] 41-3512
- Sytik, A.V.**  
Cryogenic preparation of cohesive rocks [1986, p.15-17, rus] 41-3768
- Szdanovszky, F.**  
Numerical study of plane ice-sheet flow [1986, p.139-160, eng] 41-674
- Szeto, K.**  
Observation of a model-scale semisubmersible in pack ice [1987, p.341-350, eng] 41-2441
- Szidarovszky, F.**  
Elements of a computational theory for glaciers [1986, p.132-150, eng] 41-2896  
New theory and numerical method for solving plane steady chute flows of a granular material. Applications to flow avalanches [1986, 105p., eng] 41-3337
- Plane steady shear flow of a cohesionless granular material down an inclined plane: a model for flow avalanches, part 1: theory [1986, p.87-112, eng] 41-3300  
Plane steady shear flow of a cohesionless granular material down an inclined plane. A model for flow avalanches part 2: numerical results [1987, p.239-261, eng] 41-4205
- Szilder, K.**  
Modelling ice accretion on non-rotating cylinders: the incorporation of time dependence and internal heat conduction [1987, p.177-191, eng] 41-4494
- Szyszkowski, W.**  
Modelling the mechanical properties of ice [1987, p.159-165, eng] 41-2417  
Nonlinear constitutive model for ice [1985, p.307-321, eng] 41-1357
- Taagholt, J.**  
Danish and US geophysical measurements in Greenland and surrounding areas related to arctic radiopropagation [1985, p.(7.1)1-(7.1)12, eng] 41-958  
Operational use of the satellites in connection with industrial development in Arctic regions [1986, p.71-82, eng] 41-1091
- Tabuchi, H.**  
Method and means for increasing the maneuverability of a ship in ice-covered waters [1983, 12 col., eng] 41-1981
- Tabunshchikov, I.U.A.**  
Thermal performance of the building envelope [1986, 400p., rus] 41-1749
- Tachibana, D.**  
Qualities of high-strength lightweight concrete used for construction of Arctic offshore platform [1987, p.7-15, eng] 41-2922
- Tada, H.**  
Present situation and evaluation of *in-situ* surface and base recycling [1987, p.773-811, eng] 41-4043
- Tagawa, H.**  
Development of high strength steel plates for Arctic uses manufactured by quenching and tempering process [1985, p.49-59, eng] 41-1570
- Taira, H.**  
Process of bend forming and reerecting of the lower part in the stem due to snow pressure and the tree weight increase in Tateyama Sugi (*Cryptomeria japonica* D. Don) plantations [1984, p.139-147, eng] 41-709
- Taira, T.**  
Duplex stainless steel linepipe for Arctic use [1987, p.159-165, eng] 41-4635
- Talits, V.G.**  
Mobile electric power plant EP-200 [1986, p.31-34, rus] 41-1536
- Takahashi, S.**  
Meteorological features in Langtang Valley, Nepal Himalayas, 1985-1986 [1987, p.35-40, eng] 41-3913  
Seasonal variation of snowline in Langtang Valley, Nepal Himalayas, 1985-1986 [1987, p.49-63, eng] 41-3915  
Summary of meteorological data at Kyangchen in Langtang Valley, Nepal Himalayas, 1985-1986 [1987, p.121-128, eng] 41-3924
- Takahashi, T.**  
Comparison between Landsat cloud images and precipitation radar echoes [1986, p.121-131, jpn] 41-3885  
Countermeasures against damage by heavy snowfall in Yonago District [1985, p.17-18, jpn] 41-180  
Vertical wind tunnel for snow process studies [1986, p.182-185, eng] 41-3219  
Winter cumulus electrification in an axisymmetric cloud model [1982, p.554-557, eng] 41-66
- Takahashi, Y.**  
Under-snow radar using multifrequency holography [1986, p.111-118, eng] 41-853
- Takakuwa, Y.**  
Countermeasures against damage by snow/ice on switches in European countries [1985, p.21-25, jpn] 41-182
- Takallou, H.**  
Evaluation of stripping problems in Oregon [1985, p.22-48, eng] 41-3333
- Takallou, H.B.**  
Use of rubber-modified asphalt pavements in cold regions [1987, p.541-574, eng] 41-4036
- Takase, T.**  
Fracture toughness and macrofractography of single crystal ice [1986, p.107-112, jpn] 41-2187  
Study of fracture toughness of columnar grained ice using large specimens [1986, p.887-891, jpn] 41-2200
- Takeda, K.**  
Method for evaluating the frost-susceptibility of a soil based on the condition of ice lens formation [1987, p.75-86, jpn] 41-4322
- Takeshige, T.**  
Repair of pavement in tunnels (using precast reinforced concrete slabs) [1987, p.719-733, eng] 41-4041
- Takeuchi, T.**  
Experimental study on permeability coefficient of sea ice [1986, p.237-246, eng] 41-1595
- Takhirov, I.G.**  
Stabilization of sagging loess by detonation energy, with preliminary wetting, under conditions of dissected relief [1986, p.16-19, rus] 41-880
- Takhirov, M.K.**  
Concrete with A.C.F. admixture for transportation engineering [1986, 63p., rus] 41-3803
- Takisawa, K.**  
Development of heavy thick HT80 steel plates for racks of jack-up rigs [1987, p.B-14, eng] 41-3940
- Tallin, A.**  
Structural load estimates from geographically sparse data [1987, p.628-632, eng] 41-3406
- Tam, L.T.**  
Thermal environment around the Space Shuttle with hot-gas jets for ice suppression [1986, p.547-553, eng] 41-2738
- Tamblin, H.**  
Combining of air and ice road transportation methods to build and support northern mines [1986, p.368-375, eng] 41-2036
- Tampo, T.**  
Developing machines and equipment for winter road maintenance [1983, p.268-269, fin] 41-1935
- Tamura, J.**  
Ultrasonic attenuation and dislocation damping in crystals of ice [1986, p.3445-3461, eng] 41-2975
- Tanahashi, I.**  
Evaluation of durability for concrete in terms of watertightness by "permeability coefficient test results" [1987, p.187-206, eng] 41-3694
- Tanaka, K.**  
Durability of concrete containing a shrinkage reducing admixture [1987, p.1103-1119, eng] 41-3720
- Tanaka, M.**  
Optical cable properties under frozen water in a conduit and a suitable method for prevention of the degradation [1981, p.22(1)-22(4), eng] 41-661
- Tanaka, S.**  
Comparison of the surface conditions of the inland ice sheet Dronning Maud Land, Antarctica, derived from NOAA AVHRR data with ground observation [1987, p.72-75, eng] 41-4438
- Tanaka, T.**  
Simulation for growth of snowflake [1987, p.441-443, eng] 41-3968
- Tanawawa, I.**  
Buoyancy and surface tension driven natural convection with solidification [1986, p.1733-1738, eng] 41-3292
- Tang, S.**  
Frost crack of buildings and its treatment methods in cold regions [1986, p.275-280, chi] 41-1430
- Tanimura, A.**  
Sea ice meiofauna at Syowa Station, Antarctica [1986, p.118-124, eng] 41-3634
- Tanner, A.B.**  
Passive microwave spectral emission from saline ice at C-band during the growth phase [1986, p.840-848, eng] 41-2298
- Tanner, C.B.**  
Disk camera system for automatic recording of visual data: snow depth in field plots [1987, p.927-929, eng] 41-4230
- Tanski, J.H.**  
Performance of two ice-retardant overlays [1986, 42p., eng] 41-248
- Tao, Z.**  
Probabilistic analysis of sea ice in North Bohai Bay [1987, p.387-391, eng] 41-2447  
Some characteristics of unsaturated clay during freezing [1986, p.209-216, chi] 41-1417
- Tarabukin, N.M.**  
Increasing the efficiency of fleet performance on the Kolyma route [1985, p.54-56, rus] 41-490
- Tarakanov, A.G.**  
Mudflows and mud avalanches in eastern parts of central Tien Shan and the Terskey Ala-Tau Range [1986, p.98-109, rus] 41-3807  
Rock glaciers of the Dzhetim-Bel Range, Central Tien Shan [1987, p.63-67, rus] 41-3081  
Significance of rock glaciers in the formation and development of lakes in the Tien Shan highlands [1985, p.137-145, rus] 41-3871
- Taran, I.V.**  
All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks, Novosibirsk, Aug. 26-28, 1986. Summaries [1986, 165p., rus] 41-2456
- Taraskina, N.N.**  
Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae—Leguminosae. Part 2. Family Leguminosae [1986, 188p., rus] 41-2361
- Tareeva, A.M.**  
Snow accumulation at the alimentation-limit altitude of Spitsbergen glaciers [1986, p.90-93, rus] 41-1644
- Targulian, U.C.**  
Increases in the borehole drilling rates and reduction in the duration of pile freezing in permafrost through the use of a steam vibro-leading machine [1986, p.20-23, rus] 41-4616  
Lowering piles into holes drilled with fire-jet drills in permafrost (the case of northern Tyumen' region) [1986, p.8-10, rus] 41-4615



- Manual for construction foremen working in the northern construction-climatic zone [1986, 328p., rus] 41-3664
- Toward improvement of the scientific-technical level of foundation construction on permafrost soils [1987, p.144-146, eng] 41-3214
- Tarasov, C.**  
Pedological investigations of Pleistocene glacial drift surfaces in the central Yukon [1986, p.29-37, eng] 41-2704
- Tarnogradskii, V.D.**  
Relics of Pleistocene ice sheets in permafrost areas as an object of paleoglaciological studies [1986, p.65-72, rus] 41-107  
Remnants of the Pleistocene ice sheets in the permafrost zone as an object for paleoglaciological research [1986, p.257-266, eng] 41-3616
- Tatarikova, E.G.**  
Flood water stresses on the protective hydraulic structures of Leningrad [1985, p.88-91, rus] 41-430
- Tatarikova, T.G.**  
Flood water stresses on the protective hydraulic structures of Leningrad [1985, p.88-91, rus] 41-430
- Tasson, L.V.**  
Strategy of geochemical exploration in the taiga zone [1986, p.10-14, rus] 41-198
- Tavrisov, V.M.**  
Equipment for mechanized drilling of ice covers [1987, p.13-15, rus] 41-3066  
Ice blasting [1986, 136p., rus] 41-2646
- Tay, D.C.K.**  
Deterioration of parking garages: preventative design [1985, p.228-237, eng] 41-3193
- Taylor, C.H.**  
Effects of varying snowpack and watershed conditions on snowmelt runoff response [1985, p.262-266, eng] 41-1502
- Taylor, D.A.**  
Snow loads on two-level flat roofs [1984, p.3-13, eng] 41-1942
- Taylor, D.W.**  
Degradation of surface ship operations in arctic/cold weather environments [1986, p.223-237, eng] 41-935
- Taylor, E.W.**  
Response of irradiated optical waveguides at low temperatures [1981, p.40-50, eng] 41-581
- Taylor, G.T.**  
Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover [1987, p.153-164, eng] 41-3131
- Taylor, K.S.**  
Geology and origin of the Elephant Moraine on the east antarctic ice sheet [1985, p.11-12, eng] 41-2623
- Taylor, R.K.**  
Weathering effects: slopes in mudrocks and over-consolidated clays [1987, p.405-445, eng] 41-3044
- Taylor, T.P.**  
Gravity base of offshore production platform with ice-penetrating peripheral nose sections [1983, 8 col. + figs, eng] 41-1670
- Tazawa, Y.**  
Durability of lightweight concrete for arctic concrete structures [1985, p.431-438, eng] 41-889
- Tekhta, V.G.**  
Snow removal equipment, snowplows, road cleaning machines [1986, 232p., rus] 41-3011
- Telmon, L.**  
Modification of sounding methods in organized search for avalanche victims [1986, p.64-69, ita] 41-2239
- Templeton, J.S., III**  
Foundation load/deflection analysis for concrete island drilling system under ice loading [1987, p.33-40, eng] 41-2399
- Tentakov, M.P.**  
Bioindication of vegetation disturbance from drilling oil wells in the Bol'shezemel'skaya Tundra [1986, p.94-103, rus] 41-1172
- Teodoru, G.**  
Aggregate—the decisive element in the frost resistance of concrete [1987, p.1297-1310, eng] 41-3727
- Topilanskii, N.G.**  
Bacterial plankton in the ecosystems of pelagic zones of the Barents and White seas [1986, p.18-20, rus] 41-2388
- Ter-Gazarian, G.N.**  
Using stress transducers in predicting frost resistance of concrete [1985, p.85-88, rus] 41-1622
- Terada, S.**  
Countermeasures against ice coating on trolley wires in Chiba District [1985, p.37-38, jpn] 41-185
- Terai, K.**  
Development of the low power data logger for the antarctic use [1986, p.175-188, jpn] 41-2694
- Terekhova, T.A.**  
Stresses and strains originating in structures near cracks [1985, p.55-57, rus] 41-303
- Terinov, N.N.**  
Effectiveness of the gradual and selective cuttings in the Bilibino spruce forests [1986, p.89-97, rus] 41-2877
- Terrier, G.**  
Wind studies center in the Croix de Chamrousse (Isère) mountain environment [1986, p.51-54, fre] 41-3357
- Terroux, A.C.D.**  
Ice regimes of the lower Mackenzie River and Mackenzie Delta [1981, 64p. + append., eng] 41-2727
- Terry, B.F.**  
Ice data management for support of offshore operations [1986, p.195-222, eng] 41-2275
- Tesko, S.**  
Cold weather aspects of NBC (Nuclear, Biological and Chemical) operations—a survey of selected Warsaw Pact open source literature [1985, 17p., eng] 41-3473
- Test results: performance of two ice-retardant overlays**  
Test results: performance of two ice-retardant overlays [1986, p.30-33, eng] 41-2696
- Tham, K.**  
Durability of concrete with a superplasticizing admixture [1987, p.741-764, eng] 41-3704
- Thangaraj, K.**  
X-ray diffraction and ice nucleation studies of AgI-AgCl solid solutions [1986, p.1005-1009, eng] 41-2467
- Thanos, I.**  
Behaviour of ice masses in waves [1986, p.340-357, eng] 41-1105
- Tharp, T.M.**  
Conditions for crack propagation by frost wedging [1987, p.94-102, eng] 41-4210
- Thayer, N.B.**  
Side-looking airborne radar detection and identification of icebergs [1986, p.546-554, eng] 41-165
- The Arctic, autumn '83**  
The Arctic, autumn '83 [1984, p.32-35, eng] 41-2937
- Theakstone, W.H.**  
Recent changes in a calving glacier, Austerdalsisen, Svartisen, Norway [1986, p.303-316, eng] 41-3562
- Thiel, D.V.**  
Preliminary assessment of glacial ice profiling using VLF surface-impedance measurements [1986, p.376-382, eng] 41-4292
- Thirkettle, F.W.**  
Near real-time data system for satellite passive microwave ice maps [1986, p.939-945, eng] 41-3989
- Tholen, D.J.**  
Outer solar system materials: ices and color systematics [1985, p.169-181, eng] 41-1704
- Thomas, D.P.**  
Observations of seasonal changes in diatoms at inshore localities near Davis Station, East Antarctica [1986, p.3-12, eng] 41-1173
- Thomas, D.S.**  
Storage and release of water from a large glacier-dammed lake: Russell Lake near Yakutat, Alaska, 1986 [1986, 10p., eng] 41-3303
- Thomas, G.A.N.**  
Applications of spray ice and rubble ice for Arctic offshore exploration [1987, p.1-7, eng] 41-2395
- Thomas, P.G.**  
Importance of the tectonic motions on Ganymede [1985, p.759-766, eng] 41-1736  
Tectonics of Valhalla basin on Callisto [1985, p.781-790, eng] 41-1738
- Thomas, R.H.**  
Antarctic ice-shelf boundaries and elevations from satellite radar altimetry [1987, p.229-235, eng] 41-4465  
Observing the polar regions from space [1984, p.165-171, eng] 41-2338
- Thomas, W.**  
Accumulation of airborne trace pollutants by arctic plants and soil [1986, p.47-57, eng] 41-344
- Thomas, W.L., III**  
Degradation of surface ship operations in arctic/cold weather environments [1986, p.223-237, eng] 41-935
- Thompson, E.**  
Proceedings [1986, 339p. + append., eng] 41-2201
- Thompson, E.W.**  
Arctic ship technology: the state of the art—1986 [1987, 91p., eng] 41-4582  
Evaluation and definition of the extent of superstructure icing as it may relate to ship safety and operations for the east coast of Canada [1986, 106p., eng] 41-3374
- Thompson, F.J.**  
Ice flow history and glacial dispersal in the Labrador Trough [1987, p.61-71, eng] 41-4009
- Thompson, L.G.**  
Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap [1986, p.361-364, eng] 41-2860
- Thompson, T.**  
Ice surveillance by satellite [1986, p.179-186, eng] 41-2273
- Thomsen, H.H.**  
Estimation of runoff for proposed hydropower stations near Jakobshavn and Christianshåb, West Greenland [1985, p.100-103, eng] 41-574  
Glaciological field work and remote sensing in connection with hydropower investigations, West Greenland [1985, p.95-99, eng] 41-573  
Greenland ice-sheet margin—a mine of ice for paleo-environmental studies [1987, p.229-234, eng] 41-3794  
Hydrological data collection, interpretation and analysis in Greenland [1986, p.273-282, eng] 41-3902  
Ice and hydropower [1986, 73p., dan] 41-3960
- Model for simulating the variation in the oxygen isotope ratio in the meltwater discharge from the marginal zone of the ice cap at Pákitup akuliaruuserua, Jakobshavn [1986, 34p., dan] 41-3938
- Photogrammetric and satellite mapping of the margin of the inland ice, West Greenland [1986, p.164-167, eng] 41-762
- Satellite data—their application to studies of the ice cap's marginal zone in connection with hydraulic power research [1983, 24p., dan] 41-3893
- Use of remote-sensing data in modelling run-off from the Greenland ice sheet [1987, p.215-217, eng] 41-4461
- Thomsen, T.**  
Hydrological data collection, interpretation and analysis in Greenland [1986, p.273-282, eng] 41-3902
- Thomson, B.**  
Neoglaciation in the southern Coast Mountains of British Columbia: chronology prior to the late Neoglacial maximum [1986, p.273-287, eng] 41-1928
- Thomson, D.W.**  
Relationship between micrometeorology and sound propagation above snow-covered and ground surfaces. Final report [1986, 59p., eng] 41-242
- Thoren, R.**  
Remote sensing, the Arctic and Antarctica, scientific polar research, natural resources, hydrology, exploration and transportation techniques [1986, 43p., eng] 41-787
- Thorn, C.E.**  
Particle size and clay mineral distributions within sorted and nonsorted circles and the surrounding parent material, Niwot Ridge, Front Range, Colorado, U.S.A. [1985, p.153-163, eng] 41-1226  
Stratifying alpine tundra for geomorphic studies using digitized aerial imagery [1985, p.179-187, eng] 41-1228
- Thornik, A.S.**  
Kinematics of sea ice [1986, p.489-549, eng] 41-2993  
Random discontinuous model of sea ice motion [1987, p.6515-6520, eng] 41-3642  
Statistical kinematics for the sea ice discontinuum [1986, p.282-295, eng] 41-152
- Thornes, J.E.**  
Use of a computer model to predict the formation of ice on road surfaces [1986, 19p., eng] 41-1412
- Thorning, L.**  
Determination of ice thickness by magnetic methods at Nordbøgløtcher, South Greenland [1985, p.112-114, eng] 41-577
- Throny, G.T.**  
Arctic Research and Policy Act of 1984 and its significance for the library and information community [1986, p.183-190, eng] 41-973
- Thwaites, R.**  
Characteristics of the seasonal sea ice of East Antarctica and comparisons with satellite observations [1987, p.85-91, eng] 41-4441
- Thwaites, R.J.**  
Ice-core drilling site at Law Dome summit, Wilkes Land, Antarctica [1986, 34p., eng] 41-459
- Thyssen, F.**  
Ice thickness and inner structure of the Vernagtferner (Oetzal Alps): results of electromagnetic reflection measurements [1986, p.43-60, eng] 41-3525
- Tia, M.**  
Factors affecting the cracking of asphalt concrete pavements [1986, p.96-109, eng] 41-2202
- Tian, L.S.**  
Comparative specification of engineering thermometers for low temperatures [1986, p.259-262, eng] 41-1407
- Tibbatts, R.M.**  
Norman Wells Expansion Project—overview [1986, p.51-59, eng] 41-2514
- Tice, A.R.**  
Transport of water in frozen soil 6. Effects of temperature [1987, p.44-50, eng] 41-3019
- Tien, C.L.**  
Heat transfer, 1986; proceedings [1986, 6 vols. + 1 vol. of abstracts, eng] 41-3288
- Tikhonovskaya, A.A.**  
Influence of morainial mantle on the formation of turbidity of glacial waters [1986, p.123-128, rus] 41-783
- Tikhonov, E.A.**  
Forest-tundra and north taiga forests of the Far East [1986, p.18-20, rus] 41-3744
- Tikhomirov, A.L.**  
Ground surface temperature above underground heat-pipe-lines [1986, p.94-97, rus] 41-2757
- Tikhomirova, N.A.**  
Influence of neotectonics on the development of cryogenic formations [1986, p.103-115, rus] 41-2826
- Tikhotskii, K.G.**  
Provision of hydrological information for rational use of natural resources to the Task Economic Complex of the BAM zone [1986, p.156, rus] 41-3983
- Timchenko, A.I.**  
Modeling the processes of radar sounding of ice covers [1986, p.123-126, rus] 41-704
- Timco, G.W.**  
EG/AD/S: a new type of model ice for refrigerated towing tanks [1986, p.175-195, eng] 41-1288



- Timco, G.W. (cont.)**  
Recent advances in ice mechanics in Canada [1987, p.15-35, eng] 41-2932
- Timerev, A.A.**  
Aerosol properties in the atmospheric surface layer in Severnaya Zemlya archipelago [1986, p.108-113, rus] 41-3867
- Timofeev, D.A.**  
Methods of geomorphological field experiments in the USSR [1986, 160p., rus] 41-1197
- Timokhina, E.V.**  
Stability of hydraulically built-up construction sites under dynamic loads [1986, p.29-31, rus] 41-1529
- Timokhov, L.A.**  
Sea ice dynamics. Mathematical models [1987, 272p., rus] 41-3145
- Ting, S.-K.**  
Sea-ice indentation in creeping mode [1987, p.965-983, eng] 41-3762
- Tippett, C.R.**  
Glacial dispersal train of Paleozoic erratics, central Baffin Island, N.W.T., Canada [1985, p.1818-1826, eng] 41-1242
- Tishkov, A.A.**  
Primary succession in Arctic tundra on the west coast of Spitsbergen (Svalbard) [1986, p.148-156, eng] 41-2341  
Primary successions of Arctic tundras on the west coast of Spitsbergen (Svalbard) [1986, p.99-105, rus] 41-1820
- Tison, J.L.**  
Mechanism of basal ice-layer formation involving major ice-fabric changes [1987, p.47-50, eng] 41-3594
- Titceva, G.A.**  
Construction of temporary winter roads and ice crossings [1986, p.13-14, rus] 41-914
- Titarenko, A.I.**  
Reinforcement of ice bridges over rivers via layer-by-layer ice buildup [1986, p.63-70, eng] 41-1855
- Titkov, S.N.**  
Peculiarities of mapping rock glaciers [1986, p.5-22, rus] 41-3482
- Titov, S.N.**  
Rock glaciers [1986, p.73-77, rus] 41-2535
- Titova, Z.A.**  
Results obtained in studying recent exogenic processes at the research stations of the Institute of Geography of Siberia and the Far East, Siberian Branch of the Academy of Sciences, USSR [1986, p.136-149, rus] 41-1202
- Tiutlin, A.S.**  
Changes in the Anuchin and Chernov glaciers, Polar Urals, for the last 20 years [1986, p.96-99, rus] 41-1646
- Tiulina, T.IU.**  
Strength of natural and artificially built-up ice on an ice crossing over the Lena River [1986, p.219-222, rus] 41-138
- Tiul'kova, L.A.**  
Influence of landscape conditions on hydrological and hydrochemical characteristics of lakes in Central Priob'e [1986, p.64-66, rus] 41-3977
- Tiunin, V.D.**  
Prospects for using gas-thermal methods of strengthening and rebuilding details of equipment designed for the North [1985, p.116-119, rus] 41-2853
- Tiulina, E.L.**  
Methods of studying contact interactions of materials with ice and snow [1984, p.3-7, rus] 41-4504
- Tiuri, M.**  
Mapping of snow-cover parameters by a spaceborne microwave radiometer [1986, p.209-214, eng] 41-3899  
Snow fork for field determination of the density and wetness profiles of a snow pack [1986, p.717-721, eng] 41-851  
Snow fork for field determination of the density and wetness profiles of a snow pack [1986, p.225-230, eng] 41-3901
- Tiurin, I.M.**  
Estimating the stability conditions for pile-foundation supports of high-voltage power lines in soils of the southern Far East [1985, p.63-64, rus] 41-307
- Tjelflaet, P.O.**  
Improved thermal insulation in windows by laminar airflows [1986, p.992-1003, eng] 41-1391
- Tkachenko, G.A.**  
Properties of combined aggregate concretes of centrifuged power line supports [1985, p.5-11, rus] 41-1542
- Tkachenko, I.U.V.**  
Unification principles in the design of buildings for complicated engineering and geological conditions [1985, p.34-36, rus] 41-291
- Tilsoy, M.I.**  
Microphysical conditions of hail formation in clouds [1984, p.287-290, eng] 41-4402  
Microstructural characteristics of hailstone embryos [1986, p.229-237, rus] 41-3672
- Tobiasson, W.**  
Cold regions roof design [1987, p.457-458, eng] 41-4277  
Proposed code provisions for drifted snow loads [1986, p.2080-2092, eng] 41-405  
Vents and vapor retarders for roofs [1986, 11p., eng] 41-4575
- Toda, S.**  
Laminar flow heat transfer in a tube with internal solidification [1986, p.1745-1750, eng] 41-3293
- Todd, B.J.**  
Iceberg scouring on Saglik Bank, northern Labrador Shelf [1986, p.182-193, eng] 41-3109
- Todd, M.B.**  
First offshore drilling in the Beaufort Sea [1978, p.399-405, eng] 41-2125
- Tokihito, Y.**  
Direct contact melting heat transfer on a heated surface [1986, p.1805-1810, eng] 41-3299
- Tokmagambetov, G.A.**  
Calculation and prediction of the regime and distribution of mountain glaciers [1985, 159p., rus] 41-518  
Influence of atmospheric circulation on thermal regime and ablation of the Tuyuksu Glacier [1986, p.29-34, 148-152, rus] 41-4336  
Law observed in the generation of sound in ice samples subjected to loading [1986, p.168-169, rus] 41-3240
- Tokunaga, Y.**  
Hydraulic conveying of snow. 9. Development of techniques for high snow concentration [1987, p.59-66, jpn] 41-4320
- Tokyo. National Institute of Polar Research**  
Science in Antarctica, Vol.9: Data compilation [1985, 288p., jpn] 41-1918
- Toldo, E.E., Jr.**  
Contribution to the study of sediments in the Bransfield Strait region [1987, p.127-146, por] 41-3156
- Tomasi, M.**  
Snow-halting nets on Mt. Bondone [1986, p.56-61, ita] 41-2238
- Tómasson, H.**  
History of mapping in Iceland, with special reference to glaciers [1986, p.4-7, eng] 41-728
- Tomirdiario, S.V.**  
Peculiarities of studying the Pleistocene Edoma series of the northeastern USSR [1984, p.159-173, rus] 41-1912
- Tomita, H.**  
Statement of research needs to address airport pavement distress [1987, p.981-1012, eng] 41-4050
- Tomlinson, B.**  
Storage and release of water from a large glacier-dammed lake: Russell Lake near Yakutat, Alaska, 1986 [1986, 10p., eng] 41-3303
- Tomlinson, E.M.**  
New horizontal gradient, continuous flow, ice thermal diffusion chamber [1985, p.448-467, eng] 41-3216
- Tong, B.**  
Perennially frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation [1986, p.66-78, rus] 41-2541  
Permafrost rocks of the Tsinkhai-Sizan plateau of Tibet and their formation conditions [1986, p.68-79, eng] 41-3017
- Tong, T.W.**  
Analysis of transient heat transfer measurements on porous thermal insulations [1986, p.703-708, eng] 41-3290
- Top, Z.**  
Comment on "Oxygen budget of a perennially ice-covered antarctic lake [and Reply] [1987, p.520-521, eng] 41-4226
- Evolution of dissolved oxygen in the Arctic mixed layer [1987, p.7191-7194, eng] 41-4271**
- Topchiev, A.G.**  
Satellite methods of studying nalds and ground waters of eastern Pamir [1986, p.48-58, rus] 41-3391
- Topham, D.R.**  
Field observations of flow patterns generated by an ice keel in stratified flow [1986, p.328-349, eng] 41-154
- Torgashev, P.I.**  
Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985) [1985, 119p., rus] 41-276
- Torgashev, V.V.**  
Stability of cast-in-situ drilled piles in frost heaving ground during the construction periods [1985, p.23-25, rus] 41-285
- Torgerson, L.J.**  
Mesoscale nowcasting of sea ice movement through the Bering Strait with a description of major driving forces [1987, p.193-207, eng] 41-3079
- Tornblom, A.**  
Winter navigation of icebreaking *Lunni*-class tankers in the Baltic Sea [1986, p.710-725, eng] 41-2053
- Toropov, L.N.**  
Hydraulic power construction in the North [1987, 304p., rus] 41-3013
- Toropov, V.V.**  
Blasting frozen ground in restricted circumstances [1986, p.42-44, rus] 41-512
- Torrance, K.E.**  
Phase-change heat transfer in porous media [1986, p.181-188, eng] 41-3289
- Torri, G.**  
Humic substances from deposits of a natural laboratory: a blue lake on the ice-cap (Greenland) [1987, p.107-109, eng] 41-4140
- Torsethaugen, K.**  
Waves under a small travelling wave field [1986, p.331-341, eng] 41-1814
- Toskia, V.V.**  
Some problems of building ice foundations in freezing seas [1986, p.162-166, rus] 41-2171  
Technical means for thermal drilling and cutting of ice [1986, p.37-39, rus] 41-2151
- Tovstenko, L.M.**  
Studying vertical distribution of ice-forming nuclei [1986, p.85-89, rus] 41-1452  
Using equipment designed for the "Selena-1" filters in studying natural and artificial ice-forming nuclei [1986, p.80-85, rus] 41-1451
- Toyoda, S.**  
Microbiological investigation of the human pollution at Syowa Station in Antarctica. Special reference to the specimen collected by the 23rd Japanese Antarctic Research Expedition. Pt.2 [1985, p.541-546, jpn] 41-3568
- Trabant, D.C.**  
Influence of internal accumulation and the formation of congelation ice on mass balance of the McCall glacier, Alaska [1986, p.40-49, 157-165, rus] 41-4338
- Trankle, E.**  
Multiple-scattering effects in halo phenomena [1987, p.591-599, eng] 41-3152
- Tranter, M.**  
Composition of snowfall, snowpack and meltwater in the Scottish highlands—evidence for preferential elution [1986, p.517-525, eng] 41-4533  
Spatial variability in the chemical composition of snow in a small, remote, Scottish catchment [1987, p.853-862, eng] 41-3889
- Trapeznikov, L.P.**  
Resistance of massive concrete structures to thermal cracking [1986, 271p., rus] 41-1986
- Trappeniers, N.J.**  
Phase transitions in solid methane at high pressure [1985, p.49-58, eng] 41-1696
- Trass, Kh.Kh.**  
Neutron-activation analysis of lichens and coniferous needles of cedar and fir for air pollution control of southern Pribyrkal'e [1987, p.91-102, rus] 41-3947  
Transplantation methods for lichen indication [1985, p.140-144, rus] 41-1041
- Tregub, G.A.**  
Changes in physical and mechanical properties of frozen ground used as construction material [1986, p.30-34, rus] 41-3443  
Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice [1986, p.153-158, rus] 41-2169
- Trenin, V.M.**  
Methods of determining optimal numbers of artificial Earth satellites for collecting information from automatic hydrometeorological stations [1984, p.85-88, rus] 41-559
- Treshnikov, A.F.**  
Atlas of the Arctic [1985, 204p., rus] 41-701
- Tripathi, A.K.**  
Thermodynamic theories of precipitation, dissolution, freezing and melting potentials [1986, p.179-185, eng] 41-530
- Tripoli, G.**  
Three-dimensional simulation of Florida convective clouds—Sensitivity to cloud microphysical processes [1982, p.358-361, eng] 41-34
- Tripoli, G.J.**  
Numerical simulation of the effects of small scale topographical variations on the generation of aggregate snowflakes [1984, p.613-616, eng] 41-4409  
Numerical simulation of the effects of varying ice crystal nucleation rates and aggregation processes on orographic snowfall [1986, p.1658-1680, eng] 41-2500  
Simulation of orographic clouds with a nonlinear, time-dependent model [1982, p.322-324, eng] 41-24
- Triabin, B.A.**  
Characteristics of forest resources and their use in the Bilimbav experimental and model forest [1986, p.3-15, rus] 41-2874
- Trobak, J.D.**  
Dome-Canmar's operational ice-forecasting system for the Beaufort Sea [1986, p.615-650, eng] 41-170
- Trodahl, H.J.**  
Scattering and absorption of visible light by sea ice [1987, p.867-869, eng] 41-3639
- Troendle, C.A.**  
Streamflow generation from subalpine forests [1985, p.240-247, eng] 41-450
- Trofimenkov, I.U.G.**  
Determination of the bearing capacity of piles in permafrost by static penetration [1986, p.58-63, eng] 41-1850
- Trofimov, V.T.**  
All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings [1985, 126p., rus] 41-1362

- Non-destructive control method for studying thixotropic changes in clayey grounds (1987, p.80-94, rus) 41-3400
- Regionalization of the territory of the Western Siberian Plate according to the distribution and average annual temperatures of perennally frozen and thawed ground (1985, p.66-72, rus) 41-2970
- Southern boundary of permafrost distribution within the West Siberian Plain (1986, p.106-113, rus) 41-3776
- Trofimova, E.V.**  
Allowing for physiographic factors in estimating maximum river runoff for the swampy forest zone of Priirtysh'e (1986, p.143-147, rus) 41-1372  
Experience in studying hydrographic indices of rivers in the Irtysh taiga (1986, p.66-71, rus) 41-812
- Trofimovich, N.V.**  
Designing foundations for different ground conditions (1985, p.39-41, rus) 41-293
- Troitskiy, L.S.**  
Glacioclimatic conditions in the European Arctic in the Late Holocene (1986, p.149-154, rus) 41-124
- Trost, S.E.**  
Chemistry of deicing roads: breaking the bond between ice and road (1987, p.15-26, eng) 41-2068
- Trostel, J.M.**  
Mm wave backscatter from snow on the surface at 35 and 94 GHz (1986, p.6.3.1-6.3.5, eng) 41-98
- Trush, A.I.**  
Discussion on topics of engineering-geological investigations of permafrost (1987, p.120, rus) 41-4623
- Trush, N.I.**  
Geocryological characteristics of mountainous countries in Asia (1986, p.99-108, rus) 41-2089
- Trusov, P.F.**  
Characteristics of forest resources and their use in the Bilibino experimental and model forest (1986, p.3-15, rus) 41-2874
- Tryde, P.**  
East Greenland Current—ice studies (1986, p.129-136, eng) 41-1588
- Tsang, G.**  
Frazil measured in the laboratory and in the field (1986, p.115-128, eng) 41-4515
- Tsanis, I.K.**  
Oil slicks in ice covered rivers (1985, p.369-379, eng) 41-3471
- Tsarev, B.K.**  
Composition and structure of the special data bank "Snow cover in mountains" (1986, p.3-10, rus) 41-770  
Evaluating the information content of satellite data on snow line altitude for forecasting runoff of mountain rivers in the Fergana Basin (1986, p.40-50, rus) 41-1685  
Interpolation of satellite data on seasonal snow line elevations within the mountain region limits (1986, p.59-65, rus) 41-1686  
Some properties of the regime of a stable snow cover in the Hindukush Mountains (1986, p.73-78, rus) 41-1641
- Tsay, S.-C.**  
Numerical study of the atmospheric radiative transfer process with application to the Arctic energy balance (1987, 266p., eng) 41-3799
- Tse, J.S.**  
Lattice vibrations and infrared absorption of ice Ih (1986, p.2414-2418, eng) 41-395  
Pressure-induced phase transformations in ice (1987, p.1672-1675, eng) 41-3645
- Tsinker, G.P.**  
Ice management for year-round operating marine terminals (1986, p.409-435, eng) 41-1110
- Tsuchiya, K.**  
In-place surface recycling on expressways (1987, p.893-915, eng) 41-4047
- Tsuchiya, Y.**  
Countermeasures against damage by heavy snowfall in Nagano District (1985, p.9-12, jpn) 41-177
- Tsukahara, H.**  
Mechanism of occurrence of snow damages to forestation trees in North-East Japan (1984, p.133-138, eng) 41-708
- Tsukanov, N.A.**  
Studying the cryogenic and temperature regimes of permafrost bases around foundations of power line supports (1985, p.21-32, rus) 41-1543
- Tsukerman, I.G.**  
Calculating burst-flooding of moraine-dammed lakes emptying through intraglacial drainage systems (1986, p.110-113, 221-224, rus) 41-4353
- Tsumura, H.**  
Development of high strength welding materials for low temperature service (1986, p.97-105, eng) 41-2312
- Tsvetkov, A.B.**  
Effective sectional road pavements for northern regions and Siberia (1986, 96p., rus) 41-2211
- Trykalo, V.A.**  
Influence of sub-zero temperatures on the performance of rubber shock-absorbers (1986, p.95-98, rus) 41-2711
- Trypkin, G.G.**  
Formation of a two-phase zone during the crystallization of a mixture in a porous medium (1986, p.447-449, eng) 41-3628
- Tsytorich, N.A.**  
Basic achievements and problems of engineering geocryology in construction and operation of hydraulic structures (1986, p.23-29, rus) 41-3442
- Tsytsarin, A.G.**  
Deflation of salts from ice surface in the Aral Sea (1986, p.62-69, rus) 41-1971
- Tucker, W.B.**  
Army research could reduce dangers posed by sea ice (1984, p.20-24, eng) 41-1329  
Crystal structure of Fram Strait sea ice (1986, p.20-29, eng) 41-3056  
Physical properties of sea ice discharged from Fram Strait (1987, p.436-439, eng) 41-2806  
Physical properties of summer sea ice in the Fram Strait (1987, p.6787-6803, eng) 41-4238  
Portable hot water ice drill (1986, p.549-564, eng) 41-2676  
Portable hot-water ice drill (1987, p.57-64, eng) 41-4216  
Preliminary simulation of the formation and infilling of sea ice gouges (1986, p.259-268, eng) 41-3118  
Variability of Arctic sea ice drafts (1986, p.237-256, eng) 41-2662
- Tue-Fee, K.**  
Manoeuvring tests in ice aboard USCGC *Polar Star* in Antarctica, 1985 (1986, 44p. + append., eng) 41-3373
- Tugusheva, V.I.**  
Water supply in populated points of northern regions (1987, p.6-8, rus) 41-3934
- Tunik, A.L.**  
Reference strength of ice to be used in designing offshore structures (1987, p.285-290, eng) 41-2434  
Safe speeds for navigation in ice (1986, p.1106-1124, eng) 41-1148
- Tunncliffe, M.D.**  
Circulation and water masses of the East Greenland shelf (1987, p.6729-6740, eng) 41-4233
- Tupitsyna, V.N.**  
Piles made of steel-fiber-concrete (1985, p.48-49, rus) 41-299
- Turbina, M.I.**  
Agricultural development of landscapes containing ground ice in Central Yakutia (1985, p.31-42, rus) 41-257
- Turbina, I.V.**  
Improving the design of railroad routes (1984, 106p., rus) 41-2453
- Turgunbaev, A.T.**  
Prevention of naled formation on Kirghizian mountain roads (1985, p.26-27, rus) 41-504
- Turner, R.H.**  
Optimal building shape: a general design tool (1986, p.1366-1378, eng) 41-1392
- Turvey, D.E.**  
Thermal device for aircraft measurement of the solid water content of clouds (1986, p.356-362, eng) 41-3220
- Tvede, A.**  
Comparison of glacier maps—a source of climatological information (1986, p.225-231, eng) 41-1881
- Tvede, A.M.**  
Temperature and flow conditions in a reservoir with a submerged outlet tunnel during the winter period (1986, p.399-406, eng) 41-4518
- Twickler, M.S.**  
Seasonal and spatial trends in south Greenland snow chemistry (1987, p.863-869, eng) 41-3890
- Tye, R.P.**  
New materials and concepts to reduce energy losses through structural thermal bridges (1986, p.739-750, eng) 41-1387
- U.S. Arctic Research Commission**  
National needs and Arctic research: a framework for action. Report of the U.S. Arctic Research Commission to the President and the Congress of the United States of America (1986, 24p., eng) 41-2216  
U.S. on the arctic rim. Report of the U.S. Arctic Research Commission to the President and the Congress of the United States of America for the period 1 March-30 September 1985 (1986, 33p., eng) 41-3425  
United States: an arctic nation (1987, 46p., eng) 41-2566
- U.S. Coast Guard**  
Report of the International Ice Patrol in the North Atlantic (1985, 90p., eng) 41-4576
- U.S. Department of the Interior**  
Arctic National Wildlife Refuge, Alaska, coastal plain resource assessment. Report and recommendation to the Congress of the United States and final legislative environmental impact statement (1987, 208p. + maps, eng) 41-3362
- U.S. Dept. of Agriculture. Soil Conservation Service, Anchorage, Alaska**  
Alaska snow surveys, 1986 annual data summary (1986, 17p. + map, eng) 41-3355  
Alaska snow surveys and Federal-state-private cooperative snow surveys (1987, 3 pieces, eng) 41-3313
- U.S. Geological Survey**  
Final report on freezeup studies, RU 205 (1986, var.p., eng) 41-1208
- U.S. Interagency Arctic Research Policy Committee**  
United States Arctic Research Plan (1987, 334p., eng) 41-4597
- U.S. National Foreign Assessment Center**  
Atlas of the polar regions (1985, 66p., eng) 41-2884
- U.S. National Science Foundation**  
Antarctic journal of the United States, Vol.21, No.3 (1986, 24p., eng) 41-2494
- U.S. National Technical Information Service**  
Ice and fog: detection and warning systems. December 1985-November 1986 (citations from the NTIS database) (1986, 33p., eng) 41-4128
- U.S. Naval Intelligence Support Center. Foreign Languages Services Division**  
Russian-English Arctic environment glossary (1987, 219p., eng) 41-2887
- U.S. Naval Intelligence Support Center. Translation Division**  
International symbols for marine ice maps and nomenclature of marine ice (1986, 45p., rus) 41-1896  
Russian-English Arctic environment glossary (1985, 150p., rus) 41-1897
- U.S. Naval Polar Oceanography Center**  
Antarctic ice charts 1983-1984 (1985, 125p., eng) 41-2337
- U.S. Navy. Naval Support Force, Antarctica**  
Operation Deep Freeze 87 end of season report (1987, Var. p., eng) 41-3164
- U.S. Navy Symposium on Arctic/Cold Weather Operations of Surface Ships, Dec. 3-4, 1985**  
Arctic/cold weather operations symposium, 1985; proceedings (1986, 542p., eng) 41-924
- Uchida, T.**  
Fracture toughness and macrofractography of single crystal ice (1986, p.107-112, jpn) 41-2187
- Udodov, V.P.**  
Natural environment and economics of Kuzbass (preprints of summaries for the conference) (1984, 184p., rus) 41-1904
- Ugolni, F.C.**  
Pedogenic zonation in the well-drained soils of the Arctic region (1986, p.100-120, eng) 41-793
- Ukadke, M.**  
Freeze-thaw resistance of polymer modified concrete (1987, p.863-876, eng) 41-3710
- Ukhov, S.B.**  
Peculiarities of simultaneous calculation of a nonstationary temperature field and the stress-strain state of freezing and thawing massive ground (1986, p.96-106, rus) 41-3452  
Stress-strain state of slopes with complex geological structure and the evaluation of their stability at different temperature regimes (1986, p.106-113, rus) 41-3453
- Ukkola, A.**  
Northern technical research at the University of Oulu (1986, p.113-118, eng) 41-968
- Ukrainik, V.**  
Theoretical aspect and methods of testing concrete resistance to freezing and deicing chemicals (1987, p.947-971, eng) 41-3715
- Ulmby, F.T.**  
Dielectric properties of snow in the 3 to 37 GHz range (1986, p.1329-1340, eng) 41-2313  
Microwave remote sensing—active and passive (1981, 2162p. (3 vols.), eng) 41-1508
- Umantsev, R.F.**  
Studying the state of massive rocks in areas of preliminary excavations cut in permafrost by the express method (1985, p.52-54, rus) 41-1018
- Umehara, T.**  
Hydraulic conveying of snow. 8. Blocking of snow/water mixture flow and criterion of stagnation of snow at pipe orifice (1986, p.207-214, jpn) 41-2604
- Underwood, L.S.**  
Ecological values along the North Slope portion of the Haul Road (1978, 40p., eng) 41-2076
- Untersteiner, N.**  
Geophysics of sea ice (1986, 1196p., eng) 41-2985  
Geophysics of sea ice: overview (1986, p.1-8, eng) 41-2986
- Updike, R.G.**  
Engineering geology of the Government Hill area, Anchorage, Alaska (1986, 32p., eng) 41-3224
- Upper, C.D.**  
Disk camera system for automatic recording of visual data: snow depth in field plots (1987, p.927-929, eng) 41-4230
- Urabe, N.**  
Mechanical properties of antarctic sea ice (II) (1987, p.239-244, eng) 41-2427
- Urano, T.**  
Durability of concrete containing a shrinkage reducing admixture (1987, p.1103-1119, eng) 41-3720
- Urea compound, powder**  
Urea compound, powder (1979, 7p., eng) 41-1760
- Urea compound, shotted**  
Urea compound, shotted (1979, 7p., eng) 41-1759

- Urishin, V.S.**  
Performance of the Zeya hydroelectric power plant dam during its initial period [1986, p.18-21, rus] 41-1919
- Ursova, O.A.**  
Biogeochemical indications of gold-bearing deposits in permafrost areas of the northeastern USSR [1986, p.226-227, rus] 41-202
- Urumbayev, N.A.**  
Methods of measuring avalanche velocity using laser range finders [1985, p.15-22, rus] 41-839
- Urzhamitov, I.U.S.**  
Strength of materials and structural elements at low temperatures [1985, 119p., rus] 41-2846  
Working fitness and durability of equipment in the North [1985, p.5-13, rus] 41-2847
- Ushakov, A.I.**  
Problems of snow cover classification when studying its trafficability by different type vehicles [1986, p.146-149, rus] 41-1658  
Trafficability of snow cover by wheeled vehicles from experimental data [1986, p.146-153, rus] 41-2168
- Ushakov, S.A.**  
The living Earth. Agriculture and natural resources [1986, 167p., rus] 41-1163
- Ushio, S.**  
Investigation on the straight asphalt properties of Japan [1987, p.1-36, eng] 41-4020  
Oceanic heat flux through a young sea-ice sheet [1986, p.37-43, jpn] 41-3878
- Usova, O.M.**  
Simple and multiple loading of steel under normal conditions and at low temperatures [1986, p.129-141, rus] 41-1017
- Uspenkii, A.B.**  
Methods of determining atmospheric and oceanic parameters from satellite data [1986, 160p., rus] 41-2714
- Uspenkii, S.M.**  
Natural associations of the Arctic and their protection [1986, 120p., rus] 41-3860  
Protected territories of the North [1986, p.18-24, rus] 41-3862  
Reserved zones of Franz Josef Land [1986, p.7-18, rus] 41-3861
- USSR energy atlas**  
USSR energy atlas [1985, 79p., eng] 41-480
- Ustinov, B.A.**  
Introduction of ductless pipe-laying method with solid phenol-poroplast thermal insulation [1986, p.18-20, rus] 41-2796
- Utaka, Y.**  
Basic research on the latent heat thermal energy storage utilizing the contact melting phenomena [1986, p.2946-2952, eng] 41-2109  
Direct contact melting heat transfer on a heated surface [1986, p.1805-1810, eng] 41-3299
- Utt, M.E.**  
Grounded ice island—field and laboratory research. Final report [1976, 26p. + appends., eng] 41-3569  
Grounded ice island—field and laboratory research interim report [1986, 29p. + 3 appends., eng] 41-3422
- Uttal, T.**  
Budget analysis of liquid water, vapor and ice during a mid-December Colorado orographic cloud system [1982, p.572-575, eng] 41-70
- Utashkov, I.U.D.**  
Experimental study of maneuverability of icebreakers and ships in sea ice [1986, p.276-297, eng] 41-2279
- Usov, Kh.**  
Low temperature X-ray analysis of water/poly(oxyethylene) systems [1986, p.628-634, eng] 41-2573
- Vadnais, K.G.**  
Independent measurement of snow water equivalent and soil moisture using gamma spectral attenuation [1984, p.116-125, eng] 41-1952
- Vaglio-Lauren, R.**  
Numerical modeling of optically significant characteristics of falling snow [1983, p.78-85, eng] 41-2314
- Vakulina, R.A.**  
Study of tabular ground ice bodies from the Ledyanaya Gora section in the Yenisey valley using the oxygen isotope method [1986, p.32-38, eng] 41-1789
- Vainberg, A.S.**  
Unification principles in the design of buildings for complicated engineering and geological conditions [1985, p.34-36, rus] 41-291
- Vakulenko, S.N.**  
Dust control on quarry roads at subzero temperatures [1985, p.135-136, rus] 41-2771
- Valdeev, A.E.**  
Glacier mass balance estimations from measurements made at the mean weighted altitude [1986, p.110-111, 229-229, eng] 41-1063
- Valendik, E.N.**  
Forest fire spread rates estimated from infrared images [1985, p.777-788, eng] 41-1444
- Valentini, P.**  
Glacier inventory of the province of Bolzano [1985, p.182-195, ita] 41-3186
- Glaciological investigation on the Vedrette Alta and Vedrette Occidentale di Ries (Alto Adige/South Tyrol) [1985, p.137-143, ita] 41-3181**
- Valgin, V.D.**  
Efficiency of using foam plastics as hydro-thermoinsulative materials for electrical heating plants [1986, p.17-18, rus] 41-2795
- Vall, G.**  
Ice crystal and ice nucleus measurements in cap clouds [1982, p.333-334, eng] 41-27  
Ice evolution versus precipitation in the Duero Basin [1982, p.218-221, eng] 41-20
- Valla, F.**  
Avalanche accidents in the Alps; variations during the decade 1975-1985 [1987, p.3-14, fre] 41-3417
- Vallean, N.C.**  
Electromagnetic property trends in sea ice, Part 1 [1987, 45p., eng] 41-4368  
Modeling the electromagnetic property trends in sea ice and example impulse radar and frequency-domain electromagnetic ice thickness sounding results [1986, p.57-133, eng] 41-2655
- Vallon, M.**  
Glacier mass balance reconstructions for the Northern Hemisphere covering this century and their climatic significance [1986, p.20-25, 153-157, eng] 41-1049  
Mass-balance measurements: problems and two new methods of determining variations [1986, p.446-454, eng] 41-4300
- Valmet Co. and the technology of Arctic shelf development**  
Valmet Co. and the technology of Arctic shelf development [1985, p.104-105, rus] 41-1522  
Valmet Co. program for ice testing of propeller nozzles [1985, p.108-109, rus] 41-1523
- Valsangkar, A.J.**  
Torsional resistance of a single pile in a layered soil [1986, p.1004-1019, eng] 41-3172
- Vall, A.B.**  
Calculating mean temperature of concrete during the cooling of structures [1986, p.126-130, rus] 41-2759
- Van Begin, C.**  
Durability of concrete bridges in Belgium—balance of the systematic inspection [1987, p.541-554, eng] 41-3700
- Van Cleve, K.**  
Forest ecosystems in the Alaskan taiga—a synthesis of structure and function [1986, 230p., eng] 41-1898
- Van de Griend, A.A.**  
Hydrological characteristics of an Alpine glacial valley in the North Italian Dolomites [1986, p.275-299, eng] 41-2698
- Van der Veen, C.J.**  
Dynamics of the West Antarctic Ice Sheet [1987, 368p., eng] 41-3271  
Ice sheets and the CO2 problem [1987, p.1-42, eng] 41-4136  
Longitudinal stresses and basal sliding: a comparative study [1987, p.223-248, eng] 41-3283  
West Antarctic ice sheet dynamics [1985, p.732-734, eng] 41-983  
West Antarctic Ice Sheet: the need to understand its dynamics [1987, p.1-16, eng] 41-3272
- Van Heijst, G.J.F.**  
Analytical model for ice-edge upwelling [1984, p.155-177, eng] 41-3790  
On the oceanic circulation near a shelf-ice edge [1987, p.37-56, eng] 41-3273
- Van Leer, J.C.**  
Automatic Arctic profiling system for oceanography under ice [1985, p.433-436, eng] 41-223
- Van Lith, D.**  
Effect of water content on the dark and radiation induced microwave conductivity of frozen gelatin gels [1987, p.51-56, eng] 41-2807
- Van Scoy, K.**  
Wilkes Land Expedition 1985: biological observations in the ice-edge zone [1985, p.123-124, eng] 41-2954
- Van Vliet-Lanoe, B.**  
From frost to gelification: a new approach based on micromorphology its applications to Arctic environment [1985, p.15-20, eng] 41-370  
Frost effects in soils [1985, p.117-158, eng] 41-2112
- Vanderzwaag, D.L.**  
Ocean development and management in the Arctic: issues in American and Canadian relations [1986, p.327-337, eng] 41-2724
- Vaniman, J.**  
Thermal environment around the Space Shuttle with hot-gas jets for ice suppression [1986, p.547-553, eng] 41-2738
- Van'ko, I.U.V.**  
Regionalization of permafrost zone in the USSR for environmental protection purposes [1986, p.39, rus] 41-3975
- Vasakina, K.N.**  
Increasing the efficiency of fleet performance on the Kolyma route [1985, p.54-56, rus] 41-490
- Vardiman, L.**  
Supercooled liquid water and ice crystal distributions in winter storms of the central Sierra Nevada, 1978-79 and 1979-80 [1982, p.469-472, eng] 41-59
- Variano, B.F.**  
High-pressure cell for luminescence studies of condensed phases at low temperatures [1986, p.497-498, eng] 41-960
- Varshneya, N.C.**  
Effect of ions on cloud condensation and ice nucleation [1985, p.343-350, eng] 41-2242
- Varsta, P.**  
Winter navigation—a Finnish specialty [1985, p.10-13, rus] 41-3084
- Vartsila diesels**  
Vartsila diesels [1985, p.70-73, rus] 41-1519
- Varvelli, R.**  
Computer modelling of the behaviour of ice fractured zones induced by Arctic offshore operations [1986, p.399-408, eng] 41-1109
- Vashchuk, I.M.**  
Determining servomechanism parameters of drop-wedge percussive machines [1978, p.36-41, rus] 41-1317
- Vasil'chuk, I.U.K.**  
Development of Holocene peat hummocks in northwestern Siberia [1986, p.23-128, rus] 41-2828  
Establishing the origin of ground ice according to the content of heavy oxygen isotopes and deuterium [1985, p.66-68, rus] 41-3536  
Oxygen isotope composition of syngenetic ice wedges (analytical data, problems of paleoclimatic reconstruction) [1986, p.107-119, rus] 41-3775  
Prospects for using oxygen isotope determinations in paleogeocryological reconstructions [1985, p.64-65, rus] 41-3535
- Vasilenko, N.G.**  
Results of studying soils and ground in the central BAM area [1986, p.104-118, rus] 41-425  
Structure of the water balance of river drainage basins in the permafrost zone [1986, p.326-330, eng] 41-1891
- Vasil'ev, A.A.**  
Thickness and temperature regime of permafrost in foothill areas of the Kula. Range [1986, p.47-50, rus] 41-2818
- Vasil'ev, A.N.**  
Preliminary results of studying mosses in the "Stolby" and Sayan-Shushenskoye preservation parks [1986, p.70-72, rus] 41-2457
- Vasil'ev, A.P.**  
Road design, allowing for climatic impact on traffic conditions [1986, 248p., rus] 41-2894
- Vasil'ev, I.S.**  
Methods of evaluating and mapping the susceptibility of cryogenic landscapes [1986, p.121-133, rus] 41-3493
- Vasil'ev, I.U.M.**  
Embankments built of water-logged earth with horizontal sand-drains [1985, p.2-3, rus] 41-505
- Vasil'ev, N.P.**  
Classification of means of ballasting and fastening pipelines [1986, p.20-21, rus] 41-2782
- Vasil'ev, V.F.**  
Meso- and macroscale air-sea interaction processes in the South Atlantic Ocean [1986, p.62-67, rus] 41-4188
- Vasil'ev, V.I.**  
Dynamics of temperature fields during accretion of floating ice [1986, p.39-42, rus] 41-2152  
Formation of engineering-geological conditions in Central Mongolia [1987, 144p., rus] 41-2983
- Vasil'eva, I.A.**  
Controlling filtration regimes of taliks beneath rivers by using pneumatic screens [1986, p.114-119, rus] 41-3454
- Vasilevskii, V.V.**  
Experimental application of rolled concrete mixtures at the construction site of the Bureya hydroelectric power plant in freezing weather [1987, p.8-12, rus] 41-2798
- Vasiluk, V.A.**  
Complex approach to a transportation system for newly developed areas of the northern Tyumen' region [1986, p.74-79, rus] 41-1204
- Vasiloff, S.V.**  
Wet growth of hailstones: integration of multiple doppler data and hailstone structure analysis in a kinematic model [1984, p.267-269, eng] 41-4397
- Vas'kovskii, A.P.**  
Microclimate and temperature-humidity regime of building enclosures in the North [1986, 165p., rus] 41-1681
- Vasserman, A.D.**  
Theoretical and application problems concerning air exchange in deep quarries (Summaries of reports presented at the All-Union conference held in Apatity, Sep. 23-25, 1985) [1985, 178p., rus] 41-2769
- Vaudrey, K.D.**  
Issungnak rubble pile—field installation of ice stress panels—interim report [1980, 13p. + appends., eng] 41-3552
- Vaughan, H.**  
Global response of icebreakers ramming heavy ice [1986, p.279-286, eng] 41-876  
Ice-breaking ships and operational loads [1986, p.313-322, eng] 41-1601
- Vdovina, I.U.I.**  
Experience in ice dam construction [1986, p.177-183, rus] 41-2174  
Ice and snow as a source of water supply [1986, p.189-193, rus] 41-2176

- Vefamo, S.**  
Computer modelling of ice accretion and control of icing on marine units [1986, p.497-511, eng] 41-1115
- Vetablat, B.M.**  
Experience and problems of bridge construction under severe climatic conditions [1986, p.9-11, rus] 41-1887
- Vetamanna, U.K.**  
Snow and cloud cover identification by near-infrared spectral radiance measurements from space [1921, p.219-225, eng] 41-1446
- Vetich, J.G.**  
Characterization of Arctic undersea noise [1983, 28p., + figs., eng] 41-3382
- Vekhov, N.V.**  
New and rare species of higher aquatic and hydrophilic plants in eastern Bol'shezemel'skaya tundra [1986, p.1619-1620, rus] 41-3024
- Velichko, A.A.**  
Influence of paleo-cryogenic microrelief on erosional processes and soil formation in the central Russian Plain [1986, p.102-113, rus] 41-1823  
Quaternary glaciations of Central Siberia [1986, 121p., rus] 41-1906
- Velikova, V.L.**  
Heterotrophic bacteria from soils of Arctic East Siberian tundra [1986, p.613-616, rus] 41-1826
- Venkatesh, S.**  
Micromechanics approach to sea ice dynamics [1986, p.267-281, eng] 41-151  
Modelling of Labrador Sea pack ice, with an application to estimating geostrophic currents [1987, p.161-176, eng] 41-4493  
On the deterioration of a grounded iceberg [1986, p.161-167, eng] 41-675  
On the deterioration of a grounded iceberg [1986, p.442-471, eng] 41-159  
Winter Ice Experiment Beaufort Sea (WIEBS)—data collection [1987, p.203-212, eng] 41-4274
- Ventajas, L.**  
Polynucleate hydrocarbon concentrations from oil spilled in seawater [1986, 15p., spa] 41-3999
- Verbitaki, M.I.A.**  
Modelling of the Glaciers-Ocean-Atmosphere system [1986, 133p., rus] 41-2253
- Verezhagina, I.K.**  
Physical methods of studying material used in railroad technology [1982, 135p., rus] 41-1273
- Veritec, A.S.**  
Safe speed of ships in Arctic waters [1986, p.734-746, eng] 41-2055
- Verkhotur, L.G.**  
Possibility of using the transient processes sounding method in geocryological mapping [1986, p.144-153, rus] 41-1495
- Vermette, S.J.**  
Abnormally enriched elemental concentrations in water, snow [1985, p.255-261, eng] 41-1501
- Vershina, S.A.**  
Properties of salt water ice as material for artificial islands construction [1986, p.187-194, eng] 41-2274
- Vershina, V.P.**  
Design and erection of foundations in the close vicinity of existing structures. Construction experience in the north-western USSR [1986, 95p., rus] 41-2911
- Vesikari, E.**  
Service life of concrete structures [1980, 88p., fin] 41-2444
- Vesnin, A.V.**  
Results of sounding Altai glaciers with a portable radar [1986, p.116-121, rus] 41-1650
- Vetrov, V.A.**  
Neutron-activation analysis of lichens and conifer needles of cedar and fir for air pollution control of southern Primorsky Krai [1987, p.91-102, rus] 41-3397
- Veziina, D.**  
Condition survey of concrete structures built with potentially alkali-reactive limestone aggregates from the Quebec City area (Quebec, Canada) [1987, p.133-1364, eng] 41-730  
Crack sealing: an evaluation of a few compounds and a variety of application conditions [1987, p.689-719, eng] 41-340
- Vialov, S.S.**  
Controlling soil temperature of bases using seasonally active cooling devices [1983, 123p., rus] 41-4470
- Vielle, J.**  
Design of medium voltage overhead lines to withstand abnormal climatic phenomena [1986, p.9-13, fre] 41-1560
- Vierbach, R.C.**  
Circum-Arctic petroleum potential [1986, p.101-130, eng] 41-2606
- Viereck, L.A.**  
Forest ecosystems in the Alaskan taiga—a synthesis of structure and function [1986, 230p., eng] 41-1898
- Vijay, M.M.**  
Drilling and slotting of ice and permafrost with rotating high pressure water jets [1986, p.177-187, eng] 41-2936
- Vil'derman, V.N.**  
Studying the working process of hydropneumatic hammers of the EO-2621 excavators [1978, p.74-78, rus] 41-1325
- Vilenkin, B.I.A.**  
All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports [1986, 154p., rus] 41-3539
- Vilks, G.**  
Small boat seismic reflection survey of the Loughheed Island Basin-Cameron Island Rise-Desbarats Strait region of the Arctic island channels using open water leads [1987, p.877-882, eng] 41-4015
- Villneff, H.C.**  
Performance of high ratio recycled pavements in northern Ontario [1987, p.829-865, eng] 41-4045
- Vil'ner, A.D.**  
Mobile hydraulic crane KMTS-10 [1986, p.37-38, rus] 41-438
- Vincent, C.L.**  
Antarctic stream ecosystems: variability in environmental properties and algal community structure [1986, p.511-544, eng] 41-1558
- Vincent, W.F.**  
Alph River ecosystem: a major freshwater environment in southern Victoria [1986, p.21-33, eng] 41-2871  
Antarctic stream ecosystems: variability in environmental properties and algal community structure [1986, p.511-544, eng] 41-1558  
Sources of organic nitrogen, phosphorus and carbon in antarctic streams [1986, p.215-225, eng] 41-613
- Vinchenko, V.V.**  
Technical and economic analysis of using suction-dredging technique in placer mines of northern Yakutia [1986, p.15-19, rus] 41-4550
- Vinje, T.**  
Ice transport through the Fram Strait [1986, 39p., eng] 41-1574  
Use of automatic weather stations for surface observations on Bouvetøya [1986, p.21-22, eng] 41-1076
- Vinje, T.E.**  
Drift, composition, morphology and distribution of the sea ice fields in the Barents Sea [1985, 26p., + map, eng] 41-247
- Vinogradov, A.M.**  
Constitutive modeling of ice [1987, p.181-188, eng] 41-2420  
Recent developments in the analysis of floating ice plates [1986, p.228-240, eng] 41-1099  
Time and temperature effects in the performance of drilling ice platforms [1986, p.397-405, eng] 41-1607
- Vinogradov, I.U.B.**  
Methods of calculating mudflow characteristics [1985, p.83-89, rus] 41-2730
- Vinogradov, O.**  
Rheological model for ice dynamics [1986, p.137-146, eng] 41-1589
- Vinogradov, O.G.**  
Flow of ice floe against a cylindrical structure [1987, p.365-370, eng] 41-2444
- Vinogradov, V.V.**  
Design of tall railroad embankments on weak bases [1986, p.5-6, rus] 41-1530
- Vinogradova, V.S.**  
Changes in vegetational cover induced by human factors [1985, p.3-14, rus] 41-254
- Vinson, T.S.**  
Centrifuge model experiments to determine ice forces on vertical cylindrical structures [1986, p.245-259, eng] 41-1292  
Determination of ice forces with centrifuge models [1986, p.49-60, eng] 41-1035  
Nature of fines produced in aggregate processing [1987, p.10-21, eng] 41-2765  
Statement of research needs to address airport pavement distress [1987, p.981-1012, eng] 41-4050
- Vipulanandan, C.**  
Steady-state ice-structure interaction analysis [1986, p.989-1006, eng] 41-2069
- Vitkovets, L.N.**  
Drilling bits for hard rocks [1986, p.61-65, rus] 41-4499
- Vishnukova, Z.V.**  
Microflora and the biologic activity of soils in the Lower Angara depression [1985, p.88-101, rus] 41-4112
- Vishnuta, R.**  
Analysis of melting around a moving heat source [1986, p.271-282, eng] 41-394  
Experiments on melting of unfixed ice in a horizontal cylindrical capsule [1987, p.454-459, eng] 41-3756  
Freezing of liquid-saturated porous media [1986, p.654-659, eng] 41-396  
Freezing of water and water-salt solutions around aluminum spheres [1987, p.437-446, eng] 41-4542  
Melting of frozen, porous media contained in a horizontal or a vertical cylindrical capsule [1986, p.1943-1951, eng] 41-2524
- Vislitskiy, P.A.**  
Reinforcement of ice bridges over rivers via layer-by-layer ice buildup [1986, p.63-70, eng] 41-1855
- Vita, C.L.**  
Arctic route geotechnical characterization and analysis: a systems approach [1986, 271p., eng] 41-2645
- Vitek, J.D.**  
Statistical interpretation of the fabric of a rock glacier [1985, p.165-177, eng] 41-1227
- Vivatrat, V.**  
Level ice indentation on a pile array [1987, p.273-279, eng] 41-2432
- Vladimirov, H.**  
Fatigue and freeze-thaw resistance of epoxy mortar [1985, p.33-37, eng] 41-647
- Vladimirov, L.A.**  
Snow runoff of the Transcaucasian highland [1985, p.545-547, rus] 41-1624
- Vlaskova, G.V.**  
Hydrothermal regime of soils in pine forests of Karelia [1986, 112p., rus] 41-2902
- Vlasov, E.V.**  
Monitoring potential avalanche formation and preventive avalanche triggering [1986, p.53-54, rus] 41-2559
- Vlasov, N.V.**  
Operation of outdoor distribution systems in Chita City under frost heave conditions [1985, p.26-28, rus] 41-287
- Vlasov, V.P.**  
Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan [1986, p.21-23, eng] 41-2941
- Vodolazkin, V.M.**  
Sagging of thawing clayey grounds of different consistency [1986, p.169-172, rus] 41-2097
- Voelker, R.**  
Progress in developing new design guidelines for ice transiting ships [1986, p.537-552, eng] 41-1617  
Review of research on polar class icebreakers to develop arctic ship design guidelines [1986, p.19-40, eng] 41-2022
- Voelker, R.P.**  
Ice navigation studies in the Alaskan Arctic using POLAR class icebreakers [1985, p.441-447, eng] 41-225  
Recent encounters with topside icing [1986, p.123-147, eng] 41-928
- Voevoda, A.N.**  
Drilling complex for the Far North [1986, p.30-31, rus] 41-3773
- Voevodia, V.A.**  
Adhesive nature of the interaction between snow-ice masses and icebreaker frames during fall and winter [1984, p.17-19, rus] 41-4509  
Annotated list of Soviet literature on glaciology for 1982 [1986, p.199-228, rus] 41-1648
- Voevodova, Z.I.**  
Mesoclimatic characteristics of the Timan-Pechora Regional Economic Complex [1986, p.46-56, rus] 41-1168
- Vogel, R.M.**  
Simulation of airborne snow water equivalent measurement errors made over a forested watershed [1985, p.248-255, eng] 41-451
- Voishchikov, D.**  
Operation of technical equipment in freezing weather [1987, p.78-80, rus] 41-3933
- Voitkovskiy, M.F.**  
Accumulation and preservation of massive artificial sea ice [1986, p.167-172, rus] 41-2172  
Broadening the application area of ice and snow as construction materials [1986, p.159-162, rus] 41-2170
- Voitsekhovskiy, M.B.**  
Anomalous streamer discharge in air with supercooled steam and its luminescence [1986, p.351-354, rus] 41-1628
- Vokhalis, I.U.N.**  
Rock failure under thermo-cyclic load [1987, 248p., rus] 41-4152
- Volevskaya, V.A.**  
Possibility of forecasting the intensity of ice accretion [1986, p.58-67, rus] 41-2638
- Volkonskaya, N.K.**  
Possibility of forecasting the intensity of ice accretion [1986, p.58-67, rus] 41-2638
- Volkov, A.D.**  
Biocenotic structure of forests in different landscapes of central taiga [1985, p.16-38, rus] 41-191  
Preliminary results of calibrating airborne ice crystal counters [1986, p.99-107, rus] 41-1556  
Types of landscapes in the Karelian ASSR [1985, p.4-16, rus] 41-190
- Volkova, V.P.**  
Mapping the distribution of polluted ground water in cryogenic hydrogeological structures [1986, p.95-99, rus] 41-2088
- Vollan, B.**  
Environmental conditions under polar lows [1986, p.343-357, eng] 41-1815
- Voller, V.R.**  
Applications of control volume enthalpy methods in the solution of Stefan problems [1985, p.245-275, eng] 41-658
- Vol'nov, M.V.**  
Design of tall railroad embankments on weak bases [1986, p.5-6, rus] 41-1530
- Volodicheva, N.A.**  
Mathematical modeling for determining avalanche spread boundaries [1986, p.78-81, rus] 41-1642



- Voloshchuk, N.I.**  
Problems of cloud physics [1986, p.366-369, rus] 41-3669
- Volosov, M.I.**  
Studies of the performance of elements in the SA-15 shir [1987, p.3387, rus] 41-3387
- Vol'pina, G.V.**  
Determining the velocity of [1987, p.4620, rus] 41-4620
- Von der Heydt, K.**  
Acoustic array sensor tracking system [1985, p.464-471, eng] 41-4729
- Vondra, G.**  
Making more durable concrete with polymeric fibers [1987, p.377-396, eng] 41-3697
- Voraberger, P.L.**  
Surface features of Ice Stream B, Marie Byrd Land, West Antarctica [1986, p.168-170, eng] 41-4111
- Vorob'ev, V.N.**  
Vegetation of West Siberian forests [1985, 103p., rus] 41-3979
- Vorob'ev, V.V.**  
Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.1 [1986, 166p., rus] 41-3982
- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.2 [1986, 166p., rus] 41-4060
- Environmental protection in Siberia [1985, p.52-60, rus] 41-3436
- Voronina, L.V.**  
Soil climate in southeastern West Siberia [1984, p.26-31, rus] 41-4088
- Voronkov, O.K.**  
Seismoacoustic studies of deformability of frozen and thawed calcareous clay soils [1985, p.88-95, rus] 41-3129
- Vorosh, G.S.**  
Possibilities of dispersing supercooled stratiform clouds and fog of large vertical extension [1986, p.31-43, rus] 41-1449
- Voronova, T.G.**  
Soil restoration in felled areas of bilberry pine forests [1986, p.22-31, rus] 41-2375
- Vorontsov, G.I.**  
Building pile foundations in water-saturated silty clay grounds [1986, p.8-10, rus] 41-878
- Vorotnikov, V.I.**  
Modeling the road icing process [1986, p.77-78, rus] 41-2383
- Voskresenski, K.S.**  
Regional investigations of thermal erosion [1986, p.61-63, rus] 41-4064
- Vostretsov, O.K.**  
Studying the effect of seasonal changes in the humidity of thawed ground on its strength [1985, p.84-85, rus] 41-316
- Vovchanovskii, I.F.**  
Drilling instruments made of extra-hard materials. Collection of scientific papers [1986, 87p., rus] 41-4498
- Voytek, M.A.**  
Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses [1985, p.146-147, eng] 41-2960
- Photoadaptations of photosynthesis and carbon metabolism by phytoplankton from McMurdo Sound, Antarctica. 1. Species-specific and community responses to reduced irradiances [1987, p.249-259, eng] 41-2504
- Vozin, V.F.**  
Environmental protection in Central Yakutia (Collection of scientific papers) [1985, 143p., rus] 41-253
- Voznesenskii, E.A.**  
Non-destructive control method for studying thixotropic changes in clayey grounds [1987, p.80-94, rus] 41-3400
- Voznesenskii, V.L.**  
Carbon dioxide gas exchange components of tundra plants at various temperatures [1986, p.1067-1073, rus] 41-1455
- Vozovik, I.U.I.**  
Arctic shelf in the late Pleistocene and certain problems of paleogeology [1986, p.449-452, eng] 41-2572
- Vsesoiuznaia konferentsiia "Ekologiya i biologicheskaya produktivita Barentseva moria," Murmansk, July 1986**  
All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries [1986, 268p., rus] 41-2384
- Vsesoiuznaia konferentsiia po geograficheskim problemam raionov novogo osvoeniia, Tyumen', Oct. 1986**  
All-Union conference on geographic problems in regions of new economic development. Summaries of reports [1986, 172p., rus] 41-3974
- Vsesoiuznaia shkola-seminar "Matematicheskoe modelirovaniie v nauke i tekhnike"**  
All-Union tutorial seminar on mathematical modeling in science and technology. Summaries [1986, 333p., rus] 41-2381
- Vsesoiuznoe soveshchanie po iadernno-fizicheskim metodam analiza v kontrole okruzhaiushchei sredy, 3rd, Tomsk, May 21-23, 1985**  
All-Union Conference on nuclear physical methods of environmental management, 3rd, Tomsk, May 21-23, 1985. Proceedings [1987, 172p., rus] 41-3944
- Vsesoiuznoe soveshchanie po protsessam podtopleniia zashchitnykh territorii granitnykh vodami (prognoz i zashchita), 3rd, Novosibirsk, 1984**  
All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings [1987, 120p., rus] 41-1362
- Vsesoiuznoe soveshchanie "Sovremennoe sostoiianie i perspektivy razvitiia zapovednikov v zapovednikakh Sibiri," Novosibirsk, Aug. 26-28, 1986**  
All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks, Novosibirsk, Aug. 26-28, 1986. Summaries [1986, 165p., rus] 41-2456
- Vsesoiuznyi seminar po nekontaktnym metodam i sredstvam izmereniia okeanograficheskikh parametrov, 5th, Moscow, Sep. 20-23, 1983**  
All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings [1986, 236p., rus] 41-702
- Vatovskii, I.I.**  
Introduction of resistant woody plants in Siberia [1986, p.27-34, eng] 41-1833
- Vavilov, S.I.**  
Composition and structure of the layered ice deposit "Lediania Gora" at the Yenisey River [1986, p.35-43, rus] 41-103
- Composition and structure of the Lediania Gora tabular ground ice body on the Yenisey [1986, p.273-285, eng] 41-3618
- Vavilov, S.I.**  
Geocryological account of the Schirmacher Oasis [1986, p.200-212, eng] 41-3200
- Ground ice [1986, p.36-45, rus] 41-2534
- Ground ice study in its present stage (based on Soviet publications) [1986, p.193-197, rus] 41-1667
- Significance of variations in ice-wedge forms [1986, p.190-194, rus] 41-133
- Some current problems in geocryology [1972, p.17-25, rus] 41-3746
- Vavilov, S.I.**  
Underground ice in western Siberia: origin and geological significance [1986, p.173-183, eng] 41-3197
- Vavilov, S.I.**  
Origin of humus profiles in the north-taiga paludified, loamy podzols [1986, p.78-88, rus] 41-4565
- Vavilov, S.I.**  
Significance of variations in ice-wedge forms [1986, p.190-194, rus] 41-133
- Some current problems in geocryology [1972, p.17-25, rus] 41-3746
- Vavilov, S.I.**  
Clear-felling impact on properties of sandy podzols in northern Karelia [1986, p.61-79, rus] 41-2376
- Vavilov, S.I.**  
Results and statistical analysis of ice load measurements on board icebreaker *Sisu* in winters 1979 to 1985 [1986, 52p., + append., eng] 41-2336
- Vavilov, S.I.**  
Classification of exogenic relief-forming processes on land [1986, p.20-24, rus] 41-2247
- Vavilov, S.I.**  
Construction of 110 kV substations using low-oil breakers in northern areas of the Tyumen' region [1986, p.22-23, rus] 41-1920
- Vysotskii, N.A.**  
Efficiency of small barge-carriers in the transportation-technological system of the Arctic region [1985, p.61-62, rus] 41-491
- Vysotskii, D.P.**  
Increase in the borehole drilling rates and reduction in the duration of pile preheating in permafrost through the use of a steam vibro-leading machine [1986, p.20-23, rus] 41-4616
- Wada, M.**  
Growth form of ice crystals grown in air at low supersaturation and their growth mechanism [1986, p.30-37, eng] 41-3655
- Waddington, C.K.**  
Pingos—a not so open and closed case [1985, p.30-52, eng] 41-378
- Waddington, E.D.**  
Flow near an ice divide: analysis problems and data requirements [1986, p.171-174, eng] 41-763
- Ice divide at Blue Glacier, U.S.A. [1986, p.175-176, eng] 41-764
- Wave ogives [1986, p.325-334, eng] 41-4284
- Wadhams, P.**  
On the spacing and draft distributions for pressure ridge [1986, p.10,697-10,708, eng] 41-1009
- Seasonal ice zone [1986, p.825-991, eng] 41-3000
- Wagner, C.R.**  
Overview of the U.S. Geological Survey's Hydrologic Investigation Facility [1986, p.209-218, eng] 41-538
- Wainwright, J.**  
Design and operation of the Arctic class II vessel for the Beaufort Sea [1986, p.244-256, eng] 41-2030
- First winter's experience with the air cushion vehicle *Larus* in the Beaufort Sea [1986, p.693-709, eng] 41-2052
- Wakabayashi, M.**  
Study on the improvement of weld properties for ultra-heavy steel plate (HT-50) for offshore structures in frigid regions [1984, p.53-59, eng] 41-1193
- Wakabayashi, G.**  
On snow particles comprising an aggregate [1984, p.87-90, eng] 41-4376
- Short-term variation of oxygen isotopic composition of falling snow [1986, p.353-363, eng] 41-2502
- Studies on snow production processes in a convective cloud by the simultaneous use of radars and a "cloud-shuttle solid precipitation sounder" [1984, p.113-116, eng] 41-4379
- Three dimensionally scanning Doppler radar [1986, p.133-137, jpn] 41-3886
- Wakatsuchi, M.**  
Formation processes of brine drainage channels in sea ice [1987, p.7195-7197, eng] 41-4272
- Wakiya, S.**  
Measurements of the snow fraction in a snow/water mixture flow in a pipe [1986, p.2156-2160, eng] 41-3407
- Wakonig, H.**  
Follow-up measurements of Pasterze (Glockner group) in 1984 [1984, p.223-228, ger] 41-637
- Walden, J.T.**  
Explicit technique for calculating first year ice loads on structures [1987, p.267-272, eng] 41-2431
- Walder, J.S.**  
Hydraulics of subglacial cavities [1986, p.439-445, eng] 41-4299
- Motion of sub-freezing ice soil particles, with applications to wire regulation and frozen past [1986, p.41-4296, eng] 41-4296
- Physical basis of frost weathering: toward a more fundamental and unified perspective [1986, p.27-32, eng] 41-1185
- Walker, A.E.**  
Climatological analysis of Eastern Canadian seaboard ice conditions using passive microwave satellite data (1973-1985) [1986, p.537-545, eng] 41-164
- Walker, D.A.**  
Pingos of the Prudhoe Bay region, Alaska [1985, p.321-336, eng] 41-1251
- Use of geobotanical maps and automated mapping techniques to examine cumulative impacts in the Prudhoe Bay Oilfield, Alaska [1986, p.149-160, eng] 41-4139
- Vegetation and a Landsat-derived land cover map of the Beechey Point quadrangle, Arctic Coastal Plain, Alaska [1987, 63p., eng] 41-4367
- Walker, G.G.**  
Temperature variation of the thermal properties of ice [1987, 10p., + figs., eng] 41-3238
- Walker, H.J.**  
Periglacial environments [1986, p.82-96, eng] 41-2335
- Walker, J.**  
Riverbank erosion in the Colville Delta, Alaska [1987, p.61-70, eng] 41-3555
- Walker, M.D.**  
Pingos of the Prudhoe Bay region, Alaska [1985, p.321-336, eng] 41-1251
- Walker, R.**  
Rapid one-cycle test for evaluating aggregate performance when exposed to freezing and thawing in concrete [1987, p.705-722, eng] 41-3702
- Wallen, C.C.**  
Impact of present century climate fluctuations in the Northern Hemisphere [1986, p.245-278, eng] 41-3559
- Walsh, E.J.**  
Observation of sea ice using the 36-GHz surface contour radar [1987, p.393-402, eng] 41-4174
- Walsh, J.**  
Ice hazard detection with ground wave radar [1986, 84p., eng] 41-4580
- Remote sensing of icebergs by ground-wave Doppler radar [1986, p.276-284, eng] 41-1510
- Scattering at mm wavelengths from *in situ* snow [1986, p.1.6.1-1.6.2, eng] 41-95
- Walsh, J.E.**  
Comparison of observed and modeled ice motion in the Arctic Ocean [1987, p.136-144, eng] 41-4448
- Data sensitivities of sea ice drift and ocean stress in North Atlantic high latitudes [1986, p.11,657-11,675, eng] 41-1023
- Diagnostic studies of large-scale air-sea-ice interactions [1986, p.755-784, eng] 41-2998
- Long-range prediction of iceberg severity in the Labrador Sea [1986, p.355-385, eng] 41-155
- Northern Hemisphere sea ice variability: observed and simulated [1986, p.3-20, eng] 41-143
- Synoptic-scale influences of snow cover and sea ice [1986, p.1795-1810, eng] 41-988
- Walsh, M.E.**  
Losses of explosives residues on disposable membrane filters [1987, 25p., eng] 41-3820
- Walsh, P.A.**  
Gravel characteristics in relation to the dynamics of Florida cumuli [1982, p.362-365, eng] 41-35



- Walters, J.M.  
Microwave radiometer weather-correcting sea ice algorithm [1987, p.6521-6534, eng] 41-3643
- Walton, C.  
AVHRR/HIRS operational method for satellite based sea surface temperature determination [1987, 58p., eng] 41-3570
- Walton, D.W.H.  
Antarctic science [1987, 280p., eng] 41-3531  
Antarctic terrestrial ecosystem [1987, p.83-93, eng] 41-3740
- Walton, W.B., Jr.  
Antenna ice removal and prevention apparatus [1983, 4 col., eng] 41-1979
- Wamser, C.  
Observation of the planetary boundary layer in the marginal ice zone [1987, p.6955-6965, eng] 41-4251
- Wang, A.S.  
Analysis and research of hailstone micro-structure [1982, p.450-452, eng] 41-55  
Experimental and theoretical studies of ice crystal habit development [1982, p.329-332, eng] 41-26  
Mechanism of habit development in diffusional ice crystal growth [1984, p.159-162, eng] 41-4381  
Microphysical origin of graupel and hail [1984, p.257-260, eng] 41-4395  
New models of ice crystal growth law in temperature-ice supersaturation or vapor density excess field [1984, p.179-182, eng] 41-4387  
Studies of growth rates of ice crystal at different temperature and ice supersaturation [1984, p.183-186, eng] 41-4388
- Wang, J.  
Design and application of frost test instrument named DM-10 [1986, p.319-324, chi] 41-1439  
Probabilistic analysis of sea ice in North Bohai Bay [1987, p.387-391, eng] 41-2447  
Satellite snow-cover monitoring in the Qilian Mountains and an analysis for characteristics of stream snow-melt run-off in the Hexi region, Gansu, China [1987, p.225-228, eng] 41-4464  
Three parameter representation of the shape and size distributions of hailstones—a case study [1987, p.1062-1070, eng] 41-3851
- Wang, J.H.  
Blockage of flow resulting from freezing of liquid introduced into circular tubes located in low-temperature environments [1978, p.37-42, eng] 41-468
- Wang, L.  
Ice force oscillator model for dynamic ice-structure interaction analysis [1986, p.391-196, eng] 41-1606
- Wang, P.K.  
Collection of aerosol particles by snow crystals [1985, p.171-176, eng] 41-1493  
Electrical, thermal, and diffusional properties of columnar and planar ice crystals of finite length [1982, p.338-341, eng] 41-29  
Three parameter representation of the shape and size distributions of hailstones—a case study [1987, p.1062-1070, eng] 41-3851
- Wang, S.  
Shaft sinking in water-bearing noncompetent strata in China [1985, p.1434-1437, eng] 41-857  
Types and characteristics of modern periglacial along the Qinghai-Xizang Highway [1986, p.149-158, chi] 41-1462
- Wang, X.  
Frost damage and its preventive measures of hydraulic structures in the Wujiaqi irrigation area, Xinjiang [1986, p.299-304, chi] 41-1435
- Wang, Y.  
Experimental study on frost susceptibility of wind-blown sands [1986, p.233-238, chi] 41-1421  
Outline of avalanches in China [1986, p.11-18, eng] 41-1300  
Salt and frost heave damage of lining of hydraulic structure in the irrigation system Manass River basin [1986, p.291-294, chi] 41-1433  
Some characteristics of unsaturated clay during freezing [1986, p.209-216, chi] 41-1417
- Wang, Y.S.  
Proceedings [1987, 4 vols., eng] 41-2394  
Vessel transit through ridged ice [1987, p.307-312, eng] 41-2437
- Wang, Z.  
Direct observation of basal sliding and deformation of basal drift at sub-freezing temperatures [1987, p.83-98, eng] 41-3601  
Frost heaving classifications of the coarse grained soil [1986, p.195-200, chi] 41-1415  
Research on the tunnel excavated in Urumqi Glacier No.1, Tianshan Glaciological Station, China [1987, p.99-104, eng] 41-3602
- Warbenaki, G.  
Ice data management for support of offshore operations [1986, p.195-222, eng] 41-2275  
Prediction of short-term ice edge drift [1987, p.393-400, eng] 41-2448
- Ward, R.  
Rotorcraft icing technology—an update [1983, p.(8)1-(8)15, eng] 41-3231
- Ward, R.T.  
Phytocladaphic relationships in alpine tundra of north-central Colorado, U.S.A. [1984, p.343-359, eng] 41-1235
- Ward, T.J.  
Watershed management in the eighties; proceedings [1985, 317p., eng] 41-448
- Warman, J.M.  
Effect of water content on the dark and radiation induced microwave conductivity of frozen gelatin gels [1987, p.51-56, eng] 41-2807
- Warner, J.L.  
Seafloor stability study, inner Scotian Shelf [1987, 80p., eng] 41-4531
- Warren, H.B., Jr.  
Ice thickness inductor probe [1983, 10 col., eng] 41-1675
- Wärtilä, K.L.  
Possibilities for Arctic heavy transportation [1986, 20p., eng] 41-2284
- Washburn, A.L.  
Arctic research in the national interest [1986, p.633-639, eng] 41-1033  
National needs in Arctic research [1987, p.2-9, eng] 41-2764
- Washburn, T.M.  
Technical support for the CONUS OTH-B Experimental Radar System [1980, 30p., eng] 41-4326
- Washbittl, J.  
Development and use of a new melting agent [1985, p.49-57, ger] 41-390
- Wasberg, R.  
Swedish offshore industry and some Arctic developments [1986, p.41-56, eng] 41-1089
- Watanabe, H.  
On the numerical analysis of heat transfer with phase change in groundwater flow of large Peclet number [1985, p.206-217, eng] 41-3340
- Watanabe, I.  
Analysis of the freezing around a chilled pipe in darcy flow [1978, p.31-36, eng] 41-467
- Watanabe, K.  
Apparatus for deicing of trolley wires [1980, 12 col. + 5 sheets, eng] 41-2372  
Photosynthetic nature of ice-algae under fast ice near Syowa Station, Antarctica [1986, p.34-42, eng] 41-3631
- Watanabe, O.  
Characteristics of discharge from a glacier, observed in West Kunlun Mountains, China [1987, p.111-114, eng] 41-3922  
Characteristics of the Yala Glacier from the viewpoint of tritium content [1986, p.11,841-11,844, eng] 41-1856  
First glaciological expedition to West Kunlun Mountains 1985 [1987, p.77-84, eng] 41-3918  
Glaciological studies in Asiatic highland region during 1985-1986 [1987, p.1-10, eng] 41-3908  
Proceedings of the Eighth Symposium on Polar Meteorology and Glaciology [1986, 113p., eng] 41-3653  
Process for distribution of supraglacial debris on the Khumbu Glacier, Nepal Himalaya [1986, p.129-131, eng] 41-754  
Topographic characteristics in the ablation area of the Khumbu Glacier, Nepal, Himalaya [1986, p.177-180, eng] 41-765
- Watanabe, R.K.  
Seafloor stability study, inner Scotian Shelf [1987, 80p., eng] 41-4531
- Watanabe, S.  
Effect of Al and B contents on toughness of large heat input welds of steel plates, for arctic offshore structures (Investigation on large heat input weldability of steel plates with 50 kgf/mm<sup>2</sup> grade for arctic offshore structure—2) [1986, p.B-284, eng] 41-3939
- Watanabe, T.  
Proatal rampart related to alpine debris flows in the Kurano-suke Cirque northern Japanese Alps [1986, p.213-223, eng] 41-1880  
Temperature distributions in asphalt pavements [1987, p.241-275, eng] 41-4025  
Unfrozen compartmentalized water in gels and its anomalous crystallization during warming [1986, p.5420-5426, eng] 41-2107
- Watanabe, Z.  
Design of a system of snow removing gutters and the amount of water required for the snow removal [1986, p.141-144, jpn] 41-1218
- Watershed Management Symposium, Denver, CO, Apr. 29-May 3, 1985  
Watershed management in the eighties; proceedings [1985, 317p., eng] 41-448
- Watkins, T.P.  
Phytoplankton from the southwestern Atlantic Ocean [1985, p.143-145, eng] 41-2959
- Watson, P.A.  
Attenuation in melting snow on microwave- and millimetre-wave terrestrial radio links [1985, p.68-69, eng] 41-1408
- Weaver, J.A.  
Freezing of liquid-saturated porous media [1986, p.654-659, eng] 41-396
- Melting of frozen, porous media contained in a horizontal or a vertical cylindrical capsule [1986, p.1943-1951, eng] 41-2524
- Weaver, R.  
Cryospheric data management system for special sensor microwave imager DMSP data [1985, p.411-415, eng] 41-219
- Ice thickness measurements in the Arctic Ocean—a preliminary assessment based on digitization of submarine under ice sonar data [1986, p.225-235, eng] 41-2661
- Webb, B.W.  
Experiments on melting of unfixed ice in a horizontal cylindrical capsule [1987, p.454-459, eng] 41-3756
- Webber, P.J.  
Pingos of the Prudhoe Bay region, Alaska [1985, p.321-336, eng] 41-1251  
Pollen, vegetation, and climate relationships along the Dalton Highway, Alaska, U.S.A.: a basis for Holocene paleoecological and paleoclimatic studies [1986, p.57-72, eng] 41-1188
- Weeks, W.F.  
Changes in the salinity and porosity of sea-ice samples during shipping and storage [1986, p.371-375, eng] 41-4291  
Crystal structure of Fram Strait sea ice [1986, p.20-29, eng] 41-3056  
Growth, structure, and properties of sea ice [1986, p.9-164, eng] 41-2987  
On the profile properties of undeformed first-year sea ice [1986, p.257-330, eng] 41-2663  
Physical properties of summer sea ice in the Fram Strait [1987, p.6787-6803, eng] 41-4238  
Preliminary simulation of the formation and infilling of sea ice gouges [1986, p.259-268, eng] 41-3118  
Spaceborne SAR and sea ice: a status report [1983, p.113-115, eng] 41-3347
- Weertman, J.  
Basal water and high-pressure basal ice [1986, p.455-463, eng] 41-4301
- Wei, G.  
Analysis on the effect of the measures against frost damage used in the construction of hydraulic structures in the east main canals of the Fangcao Lake [1986, p.295-298, chi] 41-1434
- Weickmann, H.K.  
Formation of frozen drops, conglomerates, and graupel [1984, p.103-105, eng] 41-4378
- Weidner, G.A.  
Antarctic automatic weather station data for the calendar year 1985 [1986, 254p., eng] 41-877
- Weigel, A.M.  
Mesoscale variability in the West Spitzbergen current and adjacent waters in Fram Strait [1987, 98p., eng] 41-3306  
MIZLANT 85 data report, results of an oceanographic cruise to the Greenland Sea, September 1985 [1986, 32p., eng] 41-1547
- Weinbaum, S.  
Boundary integral equation technique with application to freezing around a buried pipe [1987, p.223-232, eng] 41-2981
- Weir-Jones, I.  
Field performance of an ice force panel for *in situ* and structural measurements [1986, p.241-261, eng] 41-1100
- Weirich, F.H.  
Study of the nature and incidence of density currents in a shallow glacial lake [1986, p.396-413, eng] 41-3786
- Welas, R.T.  
Offshore Arctic structure [1983, 10 col., eng] 41-1771
- Welch, E.B.  
Temporal chemical variability in acid sensitive high elevation lakes [1986, p.35-44, eng] 41-2617
- Welch, J.P.  
Scientific challenges at the poles [1987, p.23-26, eng] 41-3408
- Weller, G.  
Arctic research in the national interest [1986, p.633-639, eng] 41-1033
- Wells, D.  
Level ice physical properties in support of the M.V. *Arctic* performance trials in Baffin Bay and Admiralty Inlet, May-June 1986 [1986, 89p. + appends., eng] 41-3363
- Wells, D.G.  
Merchant ship ice navigation studies in the Canadian Arctic [1986, p.859-877, eng] 41-2062
- Welsh, J.P.  
Compendium of Arctic environmental information [1986, 142p., eng] 41-483  
Discrimination of different arctic snow and sea ice surfaces using an airborne passive microwave imager [1986, p.31-56, eng] 41-2654  
Use of ice thickness data derived from aerial photographs to predict the occurrence of thin ice features [1986, p.207-223, eng] 41-2660
- Wen, R.K.  
Analysis of frozen sand beams [1983, p.790-793, eng] 41-2687  
Finite element method for analysis of frozen earth structures [1987, p.121-129, eng] 41-4489  
Flexural behavior of frozen soil [1986, p.355-361, eng] 41-1161

- Wen, T.  
Use of acoustics in localizing under-ice oil spills [1983, 17p., eng] 41-3927
- Wendler, G.  
"IAGO-Katabatic" programme [1986, p.17-18, eng] 41-1074  
Comparison of leaf and canopy reflectance of subarctic forests [1986, p.809-811, eng] 41-3848  
Wind and temperature regime along the slope of Adelie Land, Antarctica [1986, p.6735-6741, eng] 41-2141
- Wendling, P.  
Bispectral method for the height determination of optically thin ice clouds [1984, p.827-830, eng] 41-4422
- Wendt, P.A.  
Preparation for ship helo operations in the polar/sub-polar regions [1986, p.165-173, eng] 41-930
- Werme, G.  
Acid surge in a well-buffered stream [1986, p.282-285, eng] 41-2311
- Worth, J.  
Rope-stretching iceberg arrestor [1986, p.469-478, eng] 41-1613
- Wessels, E.  
Model test study of level ice forces on cylindrical multilegged structures [1986, p.251-275, eng] 41-2278
- Westerberg, T.  
Arctic logistics and supporting services [1986, 16p., eng] 41-7283  
Transportation of heavy modules to the Arctic [1986, p.1160-1168, eng] 41-1151
- Westermeyer, W.E.  
Jurisdiction and management of Arctic marine transportation [1986, p.338-349, eng] 41-2725
- Westover, D.E.  
Technical support for the CONUS OTH-B Experimental Radar System [1980, 30p., eng] 41-4326
- Wetherbee, R.  
Patterns of carbon assimilation in a microalgal community from annual sea ice, East Antarctica [1985, p.135-141, eng] 41-1629
- Wetzel, V.  
Statistical study of late winter ice thickness distribution in the Arctic islands, 1980 data profiles [1981, 15p. + tables, eng] 41-803
- Wetzel, V.F.  
General information on ice thickness, Queen Elizabeth Islands, N.W.T. Arctic islands: 1978-1979-1980 data [1981, 35p., eng] 41-3925
- Whalley, B.  
Movement on the ice front [1986, p.294-299, eng] 41-1512
- Whalley, E.  
Difference in energy between cubic and hexagonal ice [1986, p.7009-7010, eng] 41-188  
Direction of the dipole-moment derivative of the O-H stretching vibrations of coupled O-D—O-D pairs in H<sub>2</sub>O ice Ic [1987, p.7244-7245, eng] 41-3760  
High-density amorphous ice. 3. Thermal properties [1986, p.2766-2770, eng] 41-2570  
High-density amorphous ice made by "melting" ice I or low-density amorphous ice at 77 K [1986, p.314-318, eng] 41-891  
Physics of ice: some fundamentals of planetary glaciology [1985, p.9-37, eng] 41-1694  
Raman spectrum of high-density amorphous ice [1986, p.475-478, eng] 41-892  
Structure of high-density amorphous ice by neutron diffraction [1986, p.3062-3064, eng] 41-2240
- Whalley, W.B.  
Rock glaciers, ice-cored moraines and the problem of "hidden" ice in glacier mapping [1986, p.181-183, eng] 41-766  
Rock moisture content and frost weathering under natural and experimental conditions: a comparative discussion [1985, p.337-346, eng] 41-1252
- Wharton, R.A.  
Perennial N<sub>2</sub> supersaturation in an antarctic lake [1987, p.343-345, eng] 41-2506
- Wharton, R.A., Jr.  
Comment on "Oxygen budget of a perennially ice-covered antarctic lake (and Reply)" [1987, p.520-521, eng] 41-4226
- Williams, I.M.  
Folding in the Greenland ice sheet [1987, p.485-493, eng] 41-1976  
Force budget of ice sheets [1987, p.17-36, eng] 41-2462  
Surface features of Ice Stream B, Marie Byrd Land, West Antarctica [1986, p.168-170, eng] 41-411
- Whipple, F.L.  
Present status of the icy conglomerate model [1985, p.343-366, eng] 41-1711
- White, A.H.  
Seismic exploration system [1983, 6 col., eng] 41-1982
- White, D.C.  
Lipids of the antarctic sea ice diatom *Nitzschia cylindrus* [1986, p.1649-1653, eng] 41-614  
Radar digitization, conversion and analysis of an ice hazard detection/collision avoidance system [1984, 17p., eng] 41-605
- White, F.M.  
Turbulent free convection on a large vertical icewall in seawater [1984, 7p., eng] 41-1787
- White, S.  
Initial cooling of hot-mix asphalt concrete mats: field verification of a computer model [1987, p.117-146, eng] 41-4023
- Whiteman, P.I.  
Complementary modes of air/ground transport mechanisms in Antarctic logistics support [1986, p.376-419, eng] 41-2037
- Whitfield, P.H.  
Dissolved-oxygen depressions under ice cover in two Yukon rivers [1986, p.1675-1679, eng] 41-1863
- Whiting, D.  
Durability of high-strength concrete [1987, p.169-186, eng] 41-3693
- Whittick, J.A.  
Canadian sea ice information system CSIS: an online computer database for sea ice and iceberg data [1986, p.119-124, eng] 41-969
- Whittier, J.S.  
Laboratory investigation of lightweight heater tape for shuttle propellant tank [1986, 51p., eng] 41-2070
- Whitworth, R.W.  
Configurational entropy of partially ordered ice [1987, p.6443-6445, eng] 41-4180
- Whitworth, T., III  
Water masses and currents of the southern ocean at the Greenwich Meridian [1987, p.6462-6476, eng] 41-3641
- Whyte, A.  
Evaluation of Ontario municipal experiments to reduce the use of road salt [1980, 95p., eng] 41-238
- Wichanaky, H.  
Survivability of Army fiber optics systems [1981, p.110-117, eng] 41-583
- Wiczner, J.J.  
X-ray-induced transient attenuation at low temperatures in polymer clad silica (PCS) fibers [1981, p.25-34, eng] 41-580
- Wielgolaski, F.E.  
Floral processes [1987, p.80-94, eng] 41-3235
- Wieman, T.  
Calcium magnesium acetate research in Washington State [1985, p.8-12, eng] 41-655
- Wigham, J.M.  
Use of snow-pillow data for melt rate input to the streamflow synthesis and reservoir regulation watershed model [1987, p.118-126, eng] 41-2980
- Wilcox, R.E.  
Deglaciation of the mountainous region of northwestern Montana, U.S.A., as indicated by late Pleistocene ashes [1986, p.317-325, eng] 41-1179
- Wilhelm, T.T., Jr.  
Aircraft and satellite passive microwave observations of the Bering Sea ice cover during MIZEX West [1986, p.368-377, eng] 41-833
- Wilhelmsen, K.  
Climatological study of gale-producing polar lows near Norway [1986, p.31-39, eng] 41-1798
- Wilke, G.D.  
Nimbus 7 SMMR investigation of snowpack properties in the northern Great Plains for the winter of 1978-79 [1987, p.35-46, eng] 41-3314
- Wilks, A.R.  
Characterization of Arctic undersea noise [1983, 28p. + figs, eng] 41-3382
- Williams, A.N.  
Steady-state ice-structure interaction analysis [1986, p.989-1006, eng] 41-2069
- Williams, B.  
Coast Guard's new polar icebreaker [1986, p.473-482, eng] 41-951
- Williams, C.J.  
Snow control for sloped glazing—an energy penalty [1986, p.443-448, eng] 41-1382  
Snowdrift models [1985, p.4-11, eng] 41-334
- Williams, D.R.P.  
Determination of sea ice concentration and ice edge position in the Beaufort Sea using satellite passive microwave data [1986, p.526-536, eng] 41-163
- Williams, F.M.  
R-class icebreaker model experiment results [1986, p.333-348, eng] 41-1603
- Williams, G.P.  
Measurement of water temperature during frazil ice formation [1984, 7p., eng] 41-3239
- Williams, L.D.  
Relation of millimeter-wavelength backscatter to surface snow properties [1987, p.188-194, eng] 41-3318
- Williams, P.J.  
Canada-France buried chilled pipeline experiment [1986, p.152-159, eng] 41-2521  
Internal stresses in frozen ground: Discussion [1986, p.408-410, eng] 41-1162  
Investigation of moisture movements and stresses in frozen soils [1982, 134p. + appends., eng] 41-3500
- Investigation of moisture movements and stresses in frozen soils [1982, 46p., eng] 41-3499  
Pipelines and permafrost—science in a cold climate [1986, 129p., eng] 41-3188  
Thermodynamics and mechanics of freezing soil around a pipeline [1986, 111p., eng] 41-3364
- Williams, R.E.  
U.S. Coast Guard replacement polar icebreaker [1986, p.365-388, eng] 41-1605
- Williams, R.S., Jr.  
Glacier fluctuations and glacier inventories of Iceland: evaluation and use of sources of data [1986, p.184-191, eng] 41-767  
Satellite remote sensing of Vatnajökull, Iceland [1987, p.127-135, eng] 41-4447
- Willis, P.T.  
Case studies of ice distribution in hurricanes [1982, p.335-337, eng] 41-28  
Development of precipitation near the top of a maritime convective cloud [1982, p.211-214, eng] 41-18
- Willison, J.H.M.  
Improved conductivity method for the measurement of frost hardness [1987, p.710-715, eng] 41-3778
- Wilson, C.J.L.  
Crystallographic study of the perennially frozen ice surface of Patterned Lake, Framnes Mountains, East Antarctica [1986, p.520-526, eng] 41-4307  
Dynamic recrystallization and fabric development during the simple shear of ice [1986, p.857-870, eng] 41-2809  
Origin of kinks in polycrystalline ice [1986, p.27-48, eng] 41-1036
- Wilson, D.L.  
Phytoplankton biomass and productivity in the marginal ice zone of the Fram Strait during summer 1984 [1987, p.6777-6786, eng] 41-4237
- Wilson, F.H.  
Geological literature of the Alaska Peninsula to 1985 [1986, 113p., eng] 41-957
- Wilson, H.  
Acid neutralizing capacity of glacial sediments in western Ungava [1986, p.69-85, eng] 41-346
- Wilson, J.C.  
Characteristics of the seasonal sea ice of East Antarctica and comparisons with satellite observations [1987, p.85-91, eng] 41-4441
- Wilson, J.E.  
Evaluation of stripping problems in Oregon [1985, p.22-48, eng] 41-3333
- Wilson, J.H.  
Nearfield noise measurements from an Arctic pressure ridge [1986, p.256-264, eng] 41-1029
- Wiltshire, D.A.  
Bibliography on ground water in glacial-aquifer systems in the northeastern United States [1986, 26p., eng] 41-2464
- Winchester, L.W., Jr.  
Scattering corrections to extinction coefficients measured in falling snow [1983, p.86-89, eng] 41-2315
- Winsor, W.D.  
Ice hazard detection with ground wave radar [1986, 84p., eng] 41-4580
- Winter, E.R.P.  
Onset of natural convection and heat transfer in a layer of water below melting ice [1986, p.1799-1804, eng] 41-3298
- Winterdienst-Kongress 1985: Ökologische und Ökonomische Optimierung des Strassenwinterdienstes, Murau, Austria, Jan. 29-31, 1985  
Winter Service Congress, 1985 [1985, 68p., ger] 41-384
- Wise, J.L.  
Snow loads in Alaska [1987, 42p., eng] 41-3423
- Wishaby, M.A.  
Methods for minimizing iceberg impact loads on gravity base structures; iceberg bumpers: conceptual design [1987, p.291-298, eng] 41-2435
- Witney, K.C.  
Field performance of an ice force panel for *in situ* and structural measurements [1986, p.241-261, eng] 41-1100
- Witte, D.J.  
Handbook of the statistics of various terrain and water (ice) backgrounds from selected U.S. locations [1980, 785p., eng] 41-1853
- Wittman, W.I.  
Long-range prediction of iceberg severity in the Labrador Sea [1986, p.355-385, eng] 41-155
- Wojtanek, R.  
Cold weather clothing [1986, p.349-354, eng] 41-940
- Wold, B.  
Absolute movements, mass balance and snow temperatures of the Riiser-Larsenisen Ice Shelf, Antarctica [1986, p.23-31, eng] 41-4094  
Radio echo-sounding on Jostedalbreen, Norway [1986, p.156-158, eng] 41-760
- Wolf, D.  
On deglaciation-induced perturbations of the geoid [1986, p.269-272, eng] 41-2686
- Wolf, L.W.  
Glacier-generated earthquakes from Prince William Sound, Alaska [1986, p.367-379, eng] 41-262

- Wolfe-Milner, T.**  
Development of helicopter operational capabilities in the Arctic [1986, p.336-351, eng] 41-2034
- Wolff, E.W.**  
Implications of the form of the flow law for vertical velocity and age-depth profiles in polar ice [1986, p.366-370, eng] 41-4290
- Wolff, K.**  
Correlation of model and full-scale ice navigation experiments [1986, p.43-48, ger] 41-2859
- Wollers, K.**  
Causes of fractured freeze pipes in the Hünxe shaft and their restoration [1985, p.1428-1433, eng] 41-856
- Wolynets, L.M.**  
Study of turbulent transfer in stratiform clouds and artificial crystallization zones [1984, p.719-722, eng] 41-4413
- Woo, I.J.**  
High-resolution electromagnetic altimetry over the ocean [1986, p.327-332, eng] 41-1511
- Woo, M.**  
Problems of determining snow albedo for the High Arctic [1984, p.379-386, eng] 41-4535
- Woo, M.-K.**  
Breakup of small rivers in the Subarctic [1987, p.784-795, eng] 41-4061  
Effects of forests on wetland runoff during spring [1987, p.297-307, eng] 41-4319  
Hydrology of a wetland in the continuous permafrost region [1986, p.73-91, eng] 41-2700  
Monte Carlo simulation of snow depth in a forest [1986, p.864-868, eng] 41-445  
Simulation of snow depth in a forest [1985, p.44-54, eng] 41-1483
- Wood, A.M.**  
Quantitative genetic analysis of morphological variation in an antarctic diatom grown at two light intensities [1987, p.42-54, eng] 41-3997
- Wood, E.**  
Proposed code provisions for drifted snow loads [1986, p.2080-2092, eng] 41-405
- Wood, J.A.**  
Internal pressures in freezing soils [1985, 261p., eng] 41-2015  
Internal stresses in frozen ground: Discussion [1986, p.408-410, eng] 41-1162  
Investigation of moisture movements and stresses in frozen soils [1982, 46p., eng] 41-3499  
Investigation of moisture movements and stresses in frozen soils [1982, 134p. + appenda., eng] 41-3500
- Wood, M.K.**  
Molecular-packing analysis of the crystal structures of ice [1985, p.169-172, eng] 41-2334
- Wood, R.H.**  
Freezing temperatures of aqueous solutions of methyl formate and ethyl acetate with a variety of nonelectrolytes. Gibbs energy of interaction of the ester group with other functional groups [1986, p.705-715, eng] 41-1552
- Woodard, P.D.**  
Forest hydrology and watershed management [1987, 625p., eng] 41-4313
- Woodfield, T.**  
Operating and design considerations for Antarctic resupply vessels [1986, p.531-547, eng] 41-2044
- Woodhams, R.T.**  
Polyethylene-modified bitumen for paving applications [1986, p.2685-2704, eng] 41-829
- Woodworth-Lynas, C.**  
Iceberg crater chains and scour up- and downslope [1986, p.122-128, eng] 41-3100
- Woodworth-Lynas, C.M.T.**  
Iceberg-grounding study, Labrador well-site observations [1986, p.269-283, eng] 41-3119  
Relict ice scours on King William Island, N.W.T. [1986, p.64-72, eng] 41-3093
- Woratschek, R.**  
Helicopter Icing Spray System (HISS) evaluation and improvements [1986, 148p., eng] 41-454
- Workman, G.H.**  
Parametric study of the structural response of buried Arctic pipelines subjected to differential thaw settlement [1987, p.131-138, eng] 41-4634  
Polar gas project: structural design aspects [1986, p.116-125, eng] 41-2518
- Workshop on Alaskan Hydrology: Problems Related to Glacierized Basins, Eagle River, Alaska, Apr. 1985**  
Final report [1986, 106p. + 3 appenda., eng] 41-471
- Workshop on Ice Penetration Technology, 2nd, Monterey, CA, June 16-19, 1986**  
Second Workshop on Ice Penetration Technology, 1986 [1986, 659p., eng] 41-2652
- Workshop on Ice Scour Research, Calgary, Alta., Feb. 5-6, 1985**  
Ice scour and seabed engineering: proceedings of a Workshop on Ice Scour Research [1986, 322p., eng] 41-3086  
Workshop on Subsea Permafrost, and Pipelines in Permafrost, Edmonton, Alberta, Nov. 18-19, 1985  
Proceedings [1986, 168p., eng] 41-2507
- Worsley, P.**  
Permafrost and ice-wedge growth [1986, p.683-684, eng] 41-615
- Wortley, C.A.**  
Harbor design for ice conditions [1987, p.14-15, eng] 41-3410
- Ice engineering for rivers and lakes bibliography [1987, 117p., eng] 41-3223**
- Wotherspoon, P.D.**  
Oil in ice computer simulation model [1986, p.41-46, eng] 41-343
- Wratt, G.S.**  
Alph River ecosystem: a major freshwater environment in southern Victoria [1986, p.21-33, eng] 41-2871
- Wright, B.D.**  
Natural shoal rubble pile study, Beaufort Sea, March-April 1979 [1986, 36p. + figs., appenda., eng] 41-3548
- Wright, R.**  
Weddell Fan and associated abyssal plain, Antarctica: morphology, sediment processes, and factors influencing sediment supply [1986, p.121-129, eng] 41-1278
- Wright, R.K.**  
Seasonal water budget models in the eastern Subarctic: applications, approaches, and problems [1984, p.125-141, eng] 41-3354  
Speciation of aluminum in different compartments of a drainage basin during snowmelt [1985, p.58-68, eng] 41-1485
- Wrobel, B.**  
Ice nucleus measurement intercomparisons using three systems and three natural ice nucleants [1982, p.119-122, eng] 41-11
- Wrong, G.A.**  
Role of extruded expanded polystyrene in Ontario's provincial transportation system [1987, p.575-618, eng] 41-4037
- Wu, C.Z.**  
Temperature distribution and heat transfer during curing processes of large scale concrete structures [1987, p.113-118, eng] 41-2411
- Wubbald, J.H.**  
Icebreaking operations in McMurdo Sound, Antarctica [1986, p.523-530, eng] 41-2043
- Wuebben, J.L.**  
Morphology, hydraulics and sediment transport of an ice-covered river. Field techniques and initial data [1986, 37p., eng] 41-2612
- Wurst, P.L.**  
Determination of ice forces with centrifuge models [1986, p.49-60, eng] 41-1035
- Wyllie, G.S.**  
Field experience with pulse-jet self-cleaning air filtration on gas turbines in an Arctic environment [1987, p.79-84, eng] 41-2768
- Wyppich, M.**  
Pulse radiolysis study of electrons in frozen alkaline solutions [1986, p.275-283, eng] 41-2811
- Xia, Z.**  
Analysis about frost-crack damage of retaining wall [1986, p.281-286, chi] 41-1431
- Xie, Y.**  
Design and application of frost test instrument named DM-10 [1986, p.319-324, chi] 41-1439  
Paleogeological traces and series of mutiglaciation in the Luojishan Mountain [1986, p.107-118, chi] 41-1458  
Study on land evaporability and dry-wet state of Qinghai-Xizang Plateau [1986, p.131-142, chi] 41-1460
- Xie, Z.**  
Study of glacier mass balance in China [1986, p.105-110, 223-227, eng] 41-1062
- Xu, B.**  
Influence of moisture condition on frost heave in clay [1986, p.217-222, chi] 41-1418  
Problem on frost depth of soil and shallow burying of foundation [1986, p.249-252, chi] 41-1424
- Xu, J.**  
Ice force oscillator model for dynamic ice-structure interaction analysis [1986, p.391-196, eng] 41-1606
- Xu, J.-L.**  
Vertical continuity of microphysical processes and updrafts in supercooled portions of Florida cumuli [1982, p.370-373, eng] 41-37
- Xu, Z.**  
Approximate calculation of the normal frost heaving force acting on the base of foundations [1986, p.255-260, chi] 41-1426
- Yabuta, T.**  
Excess loss of single-mode jacketed optical fiber at low temperature [1983, p.2356-2362, eng] 41-486
- Yagi, T.**  
Preliminary study on snowfall over a basin—1985 radar observation in Shinjo City [1986, p.9-24, jpn] 41-3006  
Radar observations of snowfall in 1986 over the Shinjo basin—features of vertical structures [1987, p.1-17, jpn] 41-4002
- Yakovitz, S.**  
Elements of a computational theory for glaciers [1986, p.132-150, eng] 41-2896  
New theory and numerical method for solving plane steady chute flows of a granular material. Applications to flow avalanches [1986, 105p., eng] 41-3337  
Numerical study of plane ice-sheet flow [1986, p.139-160, eng] 41-674
- Plane steady shear flow of a cohesionless granular material down an inclined plane: a model for flow avalanches, part 1: theory [1986, p.87-112, eng] 41-3300**
- Plane steady shear flow of a cohesionless granular material down an inclined plane. A model for flow avalanches part 2: numerical results [1987, p.239-261, eng] 41-4205**
- Yamada, M.**  
Characterization of recycled asphalt mixtures and their pavement performance [1987, p.813-828, eng] 41-4044  
Development of controlled-rolled type 2.5% Ni steel for low temperature uses [1984, p.28-38, eng] 41-1569
- Yamada, T.**  
Characteristics of precipitation and vertical structure of air temperature in the northern Patagonia [1987, p.15-23, eng] 41-3823  
Glaciological characteristics revealed by 37.6-m deep core drilled at the accumulation area of San Rafael Glacier, the Northern Patagonia Icefield [1987, p.59-67, eng] 41-3828  
Ice core drilling operations in the Northern Patagonia Icefield [1987, p.151-155, eng] 41-3840  
Three dimensionally scanning Doppler radar [1986, p.133-137, jpn] 41-3886  
Winter runoff in the glacialized drainage basin in Langtang Valley, Nepal Himalayas [1987, p.29-33, eng] 41-3912
- Yamada, Y.**  
Model of snow glide acceleration to full depth avalanche release [1986, p.169-180, jpn] 41-3008  
On the denudation of surface avalanche [1987, p.115-131, jpn] 41-4004
- Yamakawa, S.**  
Transmission loss of thermotropic liquid-crystal polyester-jacketed optical fibre at low temperature [1984, p.199-201, eng] 41-1916
- Yamamoto, F.**  
Transmission loss of thermotropic liquid-crystal polyester-jacketed optical fibre at low temperature [1984, p.199-201, eng] 41-1916
- Yamamoto, K.**  
Impulse radar sounding of fossil ice within the Kuranosuke perennal snow patch, central Japan [1987, p.218-220, eng] 41-4462
- Yamamoto, T.**  
Formation history and environment of cometary nuclei [1985, p.205-219, eng] 41-1706
- Yamanishi, K.**  
Automatic operation of a freeze-thawing and dewatering plant for sewage sludges [1981, p.599-604, eng] 41-873
- Yamanouchi, T.**  
Comparison of the surface conditions of the inland ice sheet, Dronning Maud Land, Antarctica, derived from NOAA AVHRR data with ground observation [1987, p.72-75, eng] 41-4438  
Determination of sea ice concentration from AVHRR visible and near infrared imagery [1986, p.89-102, eng] 41-979
- Yamashita, K.**  
Bottom topography and internal layers in east Dronning Maud Land, East Antarctica, from 179 MHz radio echosounding [1987, p.221-224, eng] 41-4463
- Yamato, T.**  
Freezing and thawing resistance of concrete containing chloride [1987, p.901-917, eng] 41-3712  
Strength and freezing-and-thawing resistance of concrete incorporating condensed silica fume [1986, p.1095-1117, eng] 41-1156
- Yan, C.**  
Numerical model of stratiform cloud [1984, p.617-619, eng] 41-4410
- Yan, M.**  
Ice features and movement north of Ellesmere Island, Canada [1987, p.32-43, eng] 41-3371
- Yang, H.**  
Distribution of existing glaciers in the Qaidam Basin [1986, p.171-175, chi] 41-1465
- Yang, S.**  
Features of the climate at Mawson Station, Antarctica [1984, p.41-58, chi] 41-266
- Yang, W.-L.**  
Image-analysis techniques for determination of morphology and kinematics in Arctic sea ice [1987, p.92-96, eng] 41-4442
- Yano, K.**  
Development of heavy thick HT80 steel plates for racks of jack-up rigs [1987, p.B-14, eng] 41-3940
- Yaps, P.D.**  
Unsteady flow simulation for an ice-covered river [1986, p.1037-1049, eng] 41-1086
- Yarbrough, D.W.**  
Analysis of transient heat transfer measurements on porous thermal insulations [1986, p.703-708, eng] 41-3290
- Yarkin, I.G.**  
Natural electrical potentials that arise when soils freeze [1986, 24p., eng] 41-3929
- Yau, H.K.**  
Numerical simulation of an Alberta hailstorm [1984, p.585-588, eng] 41-4407

- Yeh, Y.**  
Antifreeze glycoproteins from polar fish blood [1986, p.59-78, eng] 41-3165
- Yehle, L.A.**  
Description and interpretation of geologic materials from shotholes drilled for the Trans-Alaska Crustal Transect Project, Copper River basin, Alaska, May 1985 [1986, 18p., eng] 41-4106
- Yen, C.C.**  
Computing the steady state freezing front location in two-dimensional algal soils [1987, p.91-95, eng] 41-2407  
CVBEM modeling of tracking two-dimensional freezing fronts in algal soil [1987, p.109-112, eng] 41-2410  
Isothermal phase change model for freezing and thawing soils 2: model [1986, p.118-123, eng] 41-4135
- Yenushavili, I.M.**  
Numerical method for integrating the coalescence kinetic equations for cloud droplets and ice particles [1984, p.247-248, eng] 41-4393
- Ygge, A.**  
Structural safety of semis in sub-Arctic waters [1986, p.540-564, eng] 41-1117
- Yin, S.**  
Cartographic methods for large-scale glacier maps [1986, p.192-195, eng] 41-768
- Ylloplato, H.**  
Snow research started [1983, p.59-60, fin] 41-1933
- Yokel, F.Y.**  
Mat foundations for offshore structures in Arctic regions [1987, 146p., eng] 41-3029
- Yokota, A.**  
Attempts at prevention of snow, frost and ice damage in railways by means of a novel ice repellent coating system using new polymeric materials [1987, p.9-17, jpn] 41-3754
- Yokoyama, F.**  
Morphology and structure of highly elastic poly(vinyl alcohol) hydrogel prepared by repeated freezing-and-melting [1986, p.595-601, eng] 41-2574
- Yokusa, T.C.**  
Ice evolution versus precipitation in the Duero Basin [1982, p.218-221, eng] 41-20
- Yoshida, H.**  
Evaluation of bearing capacity of asphalt pavement with low-temperature transverse crackings [1987, p.367-396, eng] 41-4029
- Yoshida, M.**  
Airborne radio echo-sounding in Shirase Glacier drainage basin, Antarctica [1987, p.160-165, eng] 41-4451  
Borehole closure at Mizuho Station, Antarctica [1986, p.66-73, eng] 41-3659  
Bottom topography and internal layers in east Dronning Maud Land, East Antarctica, from 179 MHz radio echo-sounding [1987, p.221-224, eng] 41-4463  
Impulse radar sounding of fossil ice within the Kuranosuke perennal snow patch, central Japan [1987, p.218-220, eng] 41-4462  
Process for distribution of supraglacial debris on the Khumbu Glacier, Nepal Himalaya [1986, p.129-131, eng] 41-754
- Yoshida, S.**  
Influence of the melted snow water on landslides [1985, p.91-97, jpn] 41-4851
- Yoshida, Z.**  
Studies of the behavior of a snow cover on mountain slope. 21. Stress in the snow cover with wavy surface lying on a plane slope [1986, p.27-36, jpn] 41-3877
- Yoshikane, H.**  
Present situation and evaluation of *in-situ* surface and base recycling [1987, p.773-811, eng] 41-4043
- Yoshiwara, S.**  
Sub-Arctic ground improvement using the deep mixing method [1986, p.211-221, eng] 41-1097
- Yoshizawa, N.**  
Excess loss of single-mode jacketed optical fiber at low temperature [1983, p.2356-2362, eng] 41-486
- Young, C.W.**  
Kinematic model of ice penetration with lateral loading [1986, p.473-479, eng] 41-2672
- Young, E.R.**  
Kinematic model of ice penetration with lateral loading [1986, p.473-479, eng] 41-2672
- Young, O.R.**  
Age of the Arctic [1985, p.160-179, eng] 41-526
- Young, R.**  
Field test to assess snow-slope stability [1986, p.535-537, eng] 41-4310
- Young, S.C.**  
Bibliography on the fate and effects of arctic marine oil pollution [1986, 212p., eng] 41-270
- Youssefi, V.**  
Numerical modeling of optically significant characteristics of falling snow [1983, p.78-85, eng] 41-2314
- Youssef, H.**  
Determination of pore ice stresses in frozen soils [1986, p.262-282, eng] 41-1101  
Discussion of "Repeated load triaxial testing of frozen and thawed soils" by D.M. Cole, G. Durrell, and E. Chamberlain [1986, p.221-225, eng] 41-3782  
Mechanical and dynamic properties and behaviour of polycrystalline ice [1986, p.283-298, eng] 41-1102
- Mechanical properties and behaviour of frozen soils [1986, p.299-322, eng] 41-1103
- Yu, B.**  
Design for an insulated foundation of culvert and sluice [1986, p.261-266, chi] 41-1427
- Yu, J.**  
Ice algae in sea ice near Davis Station, Antarctica [1986, p.66-71, chi] 41-401  
One dominant species of diatom communities found in the sea ice near Davis Station, Antarctica [1986, p.72-75, chi] 41-402
- Yu, R.**  
Ground aircraft deicing technology review [1986, var.p., eng] 41-3378
- Yuen, D.A.**  
Climatic warming and basal melting of large ice sheets: possible complications for East Antarctica [1987, p.2947-2947, eng] 41-2947  
Explosive growth of shear-heating instabilities in the down-slope creep of ice sheets [1986, p.314-320, eng] 41-4282  
Shear heating instabilities of large ice sheets [1985, p.74-75, eng] 41-2634
- Zabolotskaya, T.N.**  
Cloud physics and modification [1986, 113p., rus] 41-1447
- Zabuzov, A.A.**  
Environmental protection of the North: a problem of national importance [1986, p.35-39, rus] 41-2560
- Zadikoff, G.**  
Artificial islands: a distinct alternative [1985, p.1056-1061, eng] 41-1915
- Zadorozhnyi, V.F.**  
Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985) [1985, 119p., rus] 41-276
- Zagidullin, A.A.**  
Devices for measuring snow avalanche velocities [1985, p.22-30, rus] 41-840
- Zagoskin, V.A.**  
Increasing the efficiency of geochemical exploration for gold ore in the economically developing taiga zone [1986, p.145-148, rus] 41-200
- Zagoskina, A.I.**  
Increasing the efficiency of geochemical exploration for gold ore in the economically developing taiga zone [1986, p.145-148, rus] 41-200
- Zaguli, R.J.**  
Potential flow analysis of glaze ice accretions on an airfoil [1984, 87p., eng] 41-3254  
Results of an experimental program investigating the effects of simulated ice on the performance of the NACA 63A415 airfoil with flap [1984, 183p., eng] 41-3255
- Zagural'skaya, L.M.**  
Changes in soil microflora induced by lumbering equipment in clear-cut areas [1986, p.79-91, rus] 41-2377
- Zahn, P.B.**  
Considerations for propellers and propulsion plants operating in northern latitudes [1986, p.175-182, eng] 41-931  
Recent encounters with topside icing [1986, p.123-147, eng] 41-928
- Zainuddin, R.**  
Plane and radial ice-shelf flow with prescribed temperature profile [1987, p.117-140, eng] 41-3277
- Zaitsev, M.V.**  
Influence of temperature regime on the determination of dates of removing formwork from concrete lining of tunnels [1987, p.63-67, rus] 41-3809
- Zaitsev, S.A.**  
Effect of external turbulence on heat and mass transfer in boundary layers [1985, p.1-8, eng] 41-1005
- Zaitsev, V.N.**  
Interactions between artificial water bodies and permafrost and the development of exogenic processes in reservoir zones [1986, p.120-127, rus] 41-2092
- Zaitsev, V.S.**  
Determining the thermal conductivity coefficient for thawed and frozen grounds [1983, p.20-24, rus] 41-4483  
Experience in studying thermal properties of ground [1986, p.115-118, rus] 41-4466  
Regularities governing thermophysical properties of peat in the Tiumen' region [1986, p.46-52, rus] 41-600
- Zaitseva, E.L.**  
Forecasting ground temperature during adfreezing of piles [1987, p.73-75, rus] 41-3269
- Zaitseva, G.M.**  
Recommendations for the factory finishings of new standard house facades for northern towns [1986, 39p., rus] 41-3021
- Zaitseva, I.G.**  
Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band [1986, p.29-42, eng] 41-2207
- Zakharovich, N.N.**  
Snow runoff of the Transcaucasian highland [1985, p.545-547, rus] 41-1624
- Zakharchuk, B.Z.**  
Physico-mathematical model of caterpillar tractors equipped with scarifier attachments [1978, p.3-7, rus] 41-1311
- Zakharov, V.A.**  
Determining loads on multi-blade milling tools [1978, p.30-36, rus] 41-1316  
Plotting a theoretical diagram of loads on cutting tools [1978, p.25-30, rus] 41-1315
- Zakrzewski, W.P.**  
On the contribution of sea ice ridges into the mass of ice in the Gulf of Bothnia [1986, p.131-144, eng] 41-3759  
Sea ice conditions in the Labrador Sea-Grand Banks area [1986, p.60-87, eng] 41-145  
Splashing a ship with collision-generated spray [1987, p.65-83, eng] 41-4217
- Zaleski-Zamenhof, L.C.**  
Towards an actual probabilistic approach in predicting offshore structures behaviour in arctic regions [1985, p.705-716, eng] 41-669
- Zal'tsman, O.M.**  
Design and construction of the socle part of the Kureyskaya channel dam [1986, p.27-31, rus] 41-2866  
Lay-out and structural design of basic structures of the Kureyskaya hydroelectric plant [1986, p.11-17, rus] 41-2863  
Organization of earthwork for quarrying, melioration, and placing cohesive ground into impervious elements of the river-bed and left-side dams of the Kureyskaya hydroelectric power plant [1986, p.45-49, rus] 41-2868  
Organizing construction of the Kureyskaya hydroelectric power plant [1986, p.17-23, rus] 41-2864  
Passing construction wastes and spanning the river at the Kureyskaya station site [1986, p.23-27, rus] 41-2865  
Using dry, low-cement, rolled concrete mix for construction of the Kureyskaya hydroelectric power plant [1986, p.31-35, rus] 41-2867
- Zamolotchkova, S.A.**  
Frost heave and segregated ice formation in univariate and non-univariate (two-, three-dimensional) process of rock freezing [1986, p.127-136, rus] 41-2093
- Zanokha, L.L.**  
Seasonal dynamics of plant communities in the southern tundra subzone of Taymyr [1986, p.135-150, rus] 41-1338  
Vascular plant flora in the vicinity of Kresty village [1986, p.101-117, rus] 41-1336  
Vegetation of southern tundras in western Taymyr Peninsula [1986, p.5-67, rus] 41-1332
- Zanolli, A.**  
Moving boundary problem: heat conduction in the solid phase of a phase-change material during melting-driven by natural convection in the liquid [1986, p.1669-1681, eng] 41-2065
- Zanon, G.**  
Present trend of the glaciers of the Italian Alps [1985, p.89-96, ita] 41-3178
- Zapf-Gilje, R.**  
Concentration of impurities during melting of snow made from secondary sewage effluent [1986, p.151-156, eng] 41-351
- Zaretzki, I.U.A.**  
Numerical evaluation of the effect of hydrometeorological factors on the formation of water reserves in soil [1986, p.46-56, rus] 41-3587
- Zarling, J.P.**  
Heat loss factors for insulated building foundations [1986, p.465-483, eng] 41-1383  
Heat transfer characteristics of a commercial thermosyphon with an inclined evaporator section [1987, p.79-84, eng] 41-2405
- Zarochevskiy, G.V.**  
Railroad track control [1986, 145p., rus] 41-2143
- Zarr, R.R.**  
Thermal resistance measurements of a well-insulated wall using a calibrated hot box [1986, p.957-973, eng] 41-1389
- Zarudnyi, I.A.K.**  
Snow cover distribution in a system of young poplar strips [1987, p.45-46, rus] 41-3745
- Zaslavskii, A.A.**  
Calculation method for determination of carburetor icing rate [1985, p.544-546, eng] 41-2944
- Zaslavskii, I.U.M.**  
Decelerating force due to flexural and gravitational waves radiated by a load moving on ice [1985, p.385-387, rus] 41-2329
- Zaverina, I.I.**  
Variation of sulfate content in Arctic atmospheric precipitation during the last 90 years [1986, p.38-42, eng] 41-1690
- Zav'yalova, I.N.**  
Humidity of air in Antarctica [1986, p.92-101, eng] 41-3953
- Zeller, E.J.**  
Nitrate flux on the Ross Ice Shelf, Antarctica, and its relation to solar cosmic rays [1986, p.1264-1267, eng] 41-2019  
Nitrate variability in South Pole and Ross Ice Shelf snow and firn [1985, p.68-69, eng] 41-2629



- Zemchikhin, V.E.**  
Regional investigations of thermal erosion [1986, p.61-63, rus] 41-4064
- Zemelman, V.B.**  
Carbonated ice process and product [1983, 10 col., eng] 41-1768  
Process for preparing gasified ice of improved stability [1983, 10 col., eng] 41-1770
- Zemtsov, A.A.**  
Borehole gas sampler for determining absolute age of ice by carbon isotope analysis [1984, p.72-78, rus] 41-2355  
Fallen-tree jams of taiga rivers in the West Siberian plain [1986, p.101-107, rus] 41-813
- Zemtsov, V.A.**  
Variability of hydrological characteristics in western Siberia [1986, 204p., rus] 41-1969
- Zeng, Q.**  
Application of NOAA/TIROS satellite data to snowmelt-runoff of Heihe Basin in Qilian Mountain [1986, p.119-130, chi] 41-1459  
Satellite snow-cover monitoring in the Qilian Mountains and an analysis for characteristics of stream snow-melt run-off in the Hexi region, Gansu, China [1987, p.225-228, eng] 41-4464  
Study on land evaporation and dry-wet state of Qinghai-Xizang Plateau [1986, p.131-142, chi] 41-1460
- Zeng, Q.Z.**  
Snow survey from meteorological satellite images in the Qilian Mountain basin in Northwest China [1986, p.1335-1340, eng] 41-2139
- Zent, A.P.**  
Mars: long term changes in the state and distribution of H<sub>2</sub>O [1985, p.535-564, eng] 41-1723
- Zephoria, M.**  
"IAGO-Katabatic" programme [1986, p.17-18, eng] 41-1074
- Zgadzai, L.K.**  
Reaction of loess soils with hydrofluosilicic acid and carbamide resins [1986, p.53-57, rus] 41-601
- Zhang, G.-P.**  
Steady and transient, multi-dimensional solutions for melting or freezing around a buried tube in a semi-infinite medium [1986, 167p., eng] 41-2588
- Zhang, J.**  
Study of glacier mass balance in China [1986, p.105-110, 223-227, eng] 41-1062
- Zhang, K.**  
Formation of the ice algae layer in antarctic sea ice [1986, p.60-65, chi] 41-400  
Ice algae in sea ice near Davis Station, Antarctica [1986, p.66-71, chi] 41-401  
Identification of phytoplankton pigments in inshore water near Davis Station, Antarctica [1986, p.110-115, chi] 41-403  
One dominant species of diatom communities found in the sea ice near Davis Station, Antarctica [1986, p.72-75, chi] 41-402  
Some ecological observations on antarctic ice algae [1986, p.49-59, chi] 41-399
- Zhang, M.I.N.**  
Improved conductivity method for the measurement of frost hardness [1987, p.710-715, eng] 41-3778
- Zhang, Q.**  
Sea ice observations and measurements at Davis, East Antarctica [1986, p.143-148, chi] 41-1461
- Zhang, S.**  
Application of NOAA/TIROS satellite data to snowmelt-runoff of Heihe Basin in Qilian Mountain [1986, p.119-130, chi] 41-1459  
Satellite snow-cover monitoring in the Qilian Mountains and an analysis for characteristics of stream snow-melt run-off in the Hexi region, Gansu, China [1987, p.225-228, eng] 41-4464
- Zhang, X.**  
Recent glacier oscillations in China [1986, p.99-105, 217-223, eng] 41-1061
- Zhang, Z.**  
Modern glaciers on the south slope of West Kunlun Mountains (in Aksayin Lake and Guozha Co Lake drainage areas) [1987, p.85-91, eng] 41-3919
- Zharkova, I.U.G.**  
Man-induced erosion in Bol'shezemel'skaya tundra [1986, p.94-98, rus] 41-1794
- Zhelezniak, I.I.**  
Effective types of foundations for low-rise buildings on frost-heaving ground [1985, p.47, rus] 41-298  
Operation of outdoor distribution systems in Chita City under frost heave conditions [1985, p.26-28, rus] 41-287
- Zhelezniak, M.N.**  
Mapping frozen strata in troughs of the BAM zone [1986, p.106-113, rus] 41-3491
- Zheng, B.**  
First glaciological expedition to West Kunlun Mountains 1983 [1987, p.77-84, eng] 41-3918  
Preliminary studies of Quaternary glaciation and palaeogeography on the south slope of West Kunlun [1987, p.93-102, eng] 41-3920
- Zheng, S.Y.**  
Snow survey from meteorological satellite images in the Qilian Mountain basin in Northwest China [1986, p.1335-1340, eng] 41-2139
- Zhestkova, T.N.**  
Origin of Edoma deposits [1986, p.108-113, rus] 41-2090
- Zhezhenko, I.V.**  
Calculation of harmonic levels in currents and their influence on communication lines when thawing iced power lines [1986, p.16-21, rus] 41-2546
- Zhidkov, V.A.**  
Modeling snow cover during the periods of its formation and melting [1986, p.50-56, rus] 41-1637  
Variability of snow cover properties in medium-high mountains [1986, p.150-155, rus] 41-1659
- Zhigalkin, V.M.**  
Simple and multiple loading of steel under normal conditions and at low temperatures [1986, p.129-141, rus] 41-1017
- Zhigarev, L.A.**  
Methods of studying cryogenic relief-forming processes at research stations [1986, p.111-119, rus] 41-1199  
Methods of studying cryogenic slope processes at research stations [1986, p.120-129, rus] 41-1200
- Zhivotkevich, N.I.**  
Improving the efficiency of petroleum transportation by river [1986, 96p., rus] 41-2914
- Zhong, Z.**  
Arch and hollow foundation for anti-heave [1986, p.271-174, chi] 41-1429
- Zhorochko, I.O.**  
Studying the effect of ground conditions on strength and stability of no-pilework bridge supports exposed to moving ice [1987, p.101-104, rus] 41-3792
- Zhou, L.**  
On Stability analyses of soil slope in irrigation canal with plastic film lining [1986, p.245-248, chi] 41-1423
- Zhou, S.**  
Where are the former glacial relics in Guilin area [1986, p.97-106, chi] 41-1457
- Zhou, Y.**  
Anti-heave effect of middle coarse sand cushion [1986, p.227-232, chi] 41-1420
- Zhu, C.**  
Concrete linings for channels as a anti-heave measures, Zhincha Hsien, Gansu [1986, p.309-312, chi] 41-1437
- Zhu, D.**  
Discussion on Anti-heave effect of wind-blown sands in irrigation canal with concrete lining [1986, p.239-244, chi] 41-1422  
Frost heave classification of canal base-soil with concrete lining and the measures against frost damage [1986, p.201-208, chi] 41-1416
- Zhu, X.**  
Problems of constructing subgrade and pavement in the plateau frozen soil zone [1986, p.1-9, eng] 41-2197
- Zhuiko, P.I.A.**  
Energy-saving techniques for winter works [1986, p.18-20, rus] 41-2557
- Zhak, L.I.**  
Experimental determination of water movement in the Firn layers of Abramov Glacier [1986, p.110-117, rus] 41-781
- Zhakova, A.L.**  
Hepatics in the vicinity of Kresty village (southern tundra subzone, western Taymyr) [1986, p.80-88, rus] 41-1334  
Liverwort mosses of the Matuiyakhka river (Yamal Peninsula) [1986, p.642-649, rus] 41-2561
- Zhakova, S.V.**  
Forecasting wet snow avalanches from meteorological data [1986, p.32-39, rus] 41-773
- Zhuravlev, I.U.E.**  
Cryostat with 3He-vapor evacuation [1987, p.979-981, eng] 41-3159
- Zhuravleva, V.A.**  
Lidar-radiometric method for determining the ice water content of cirrus clouds [1986, p.32-38, eng] 41-3251
- Zharkin, K.A.**  
Improving the reliability of 204M excavators under northern conditions [1986, p.11-16, rus] 41-4525
- Ziabchenko, S.S.**  
Dynamics of plant communities following the felling of forest [1986, p.5-22, rus] 41-2374  
Silvicultural and ecologic consequences of felling in Karelian forests [1986, 198p., rus] 41-2373
- Ziangirov, R.S.**  
Engineering geology in construction [1986, 175p., rus] 41-2889
- Zibell, H.G.**  
Behaviour of ice masses in waves [1986, p.340-357, eng] 41-1105
- Zieger, M.A.J.**  
Enhancement of NOAA AVHRR digital data for sea ice analysis in an operational environment [1986, p.495-508, eng] 41-161
- Ziegler, C.L.**  
Hail formation in an Oklahoma multicell storm [1982, p.427-430, eng] 41-49
- Ziganshin, R.A.**  
Differentiation in forest conditions of mountain regions and phytocenotic productivity [1984, p.78-87, rus] 41-1081
- Zil'berberg, V.V.**  
Heat and mass transfer during crystal growth from water solutions [1986, p.54-55, rus] 41-2382
- Zilberberg, Y.M.**  
Computer aided thermal analysis of heat flow within the floor of an ice skating rink [1986, p.263-285, eng] 41-1598
- Zimmerman, R.W.**  
Effect of the extent of freezing on seismic velocity in unconsolidated permafrost [1986, p.1285-1290, eng] 41-1213
- Zimnitskiy, I.U.A.**  
Temperature fields in the hulls of Arctic ships [1985, p.9-10, rus] 41-3350
- Zimov, S.A.**  
Stability of tundra landscapes under transport loads [1986, p.22-23, rus] 41-4063
- Zinchenko, V.I.**  
Results of studying noise and vibration of the "Igarka" (SA-15) motorship under ice navigation conditions [1986, p.48-63, rus] 41-3390
- Zinov'ev, V.N.**  
Improving the cleaning, hydraulic testing and water expulsion on main pipelines in freezing weather [1987, p.29-31, rus] 41-3736
- Ziskovich, V.Kh.**  
Influence of geocryological conditions of the construction site on the design of the Vilyuy Hydroelectric Power Plant No.3 [1986, p.53-55, rus] 41-907
- Zmeureanu, R.**  
Simplified procedure to estimate the dynamic thermal performance of existing walls [1986, p.255-271, eng] 41-1380
- Zol'nikov, I.D.**  
Genetic and facies analysis of glacial deposits [1986, 78p., rus] 41-4523
- Zolotarev, E.A.**  
Methods of compiling medium-scale maps of genetic avalanche types (exemplified by the northern macroslope of Dzhungarskiy Alatau) [1986, p.206-211, rus] 41-136
- Zotikov, I.A.**  
Oceanic inclusions in the J-9 sea-ice core [1985, p.113-115, eng] 41-2952  
Thermophysics of glaciers [1986, 275p., eng] 41-2565
- Zubakin, G.K.**  
Ice cover of the North European Basin as an indication of natural climatic cycles [1986, p.122-127, rus] 41-119
- Zubareva, R.S.**  
Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilimbaev experimental forest taken as an example) [1986, 158p., rus] 41-2873
- Zabkov, V.I.**  
Calculated bases for winter concreting technology for construction of buildings of rectangular cross sections [1986, p.118-122, rus] 41-907
- Zanke, D.**  
Modeling runoff from Vernagtferner glacier, the Oetzal Alps, Austria [1986, p.65-69, 178-182, rus] 41-4342  
Runoff in basins with variable extent of glaciation [1986, p.59-64, 173-178, rus] 41-4341
- Zuzel, J.F.**  
Point probability distributions of frozen soil [1986, p.1681-1686, eng] 41-2501
- Zvereva, T.S.**  
Peculiarities of weathering and soil formation in forest tundra of the Northern Ob' Region [1986, p.58-63, rus] 41-1164
- Zwally, H.J.**  
Antarctic ice-shelf boundaries and elevations from satellite radar altimetry [1987, p.229-235, eng] 41-4465  
Comparison of observed and modeled ice motion in the Arctic Ocean [1987, p.136-144, eng] 41-4448  
Remote sensing as a research tool [1986, p.1021-1098, eng] 41-3002  
Seasat range measurements verified on a D-D ice sheet [1986, p.69-72, eng] 41-741
- Zyrianov, P.A.**  
Influence of temperature of the medium on technological properties of carbamide resins used in the injection-strengthening of rocks [1986, p.29-33, rus] 41-3767



# SUBJECT INDEX

## Ablation

- Experimental determination of water movement in the Firn layers of Abramov Glacier. Glazyrin, G.E., et al, 1986, p.110-117, rus; 41-781
- Measurement of ablation of exposed ground ice. Lewkowicz, A.G., 1985, p.1767-1773, eng; 41-1241
- Radioactive isotopes related to ice sheet accumulation and ablation. Lal, D., et al, 1987, p.4947-4952, eng; 41-3343
- Bottom ablation and heat transfer in the ice edge zone, 1983. Joebberger, E.G., 1987, p.7012-7016, eng; 41-4256
- Ablation of exposed ground ice. Lewkowicz, A.G., 1986, p.511-519, eng; 41-4306
- Influence of katabatic wind on snow and ice ablation. Ohata, T., 1986, p.25-29, 144-147, rus; 41-4335
- See also: Glacier ablation

## Abrasion

- Problems of studying sediment balance in coastal zones of seas. Shulskii, I.U.D., 1986, 240p., rus; 41-516
- Glacial erosion in western Antarctica. Glazovskii, A.F., 1986, p.135-139, rus; 41-1655
- Classifying frozen ground according to abrasion power. Leshchiner, V.B., et al, 1982, p.8-14, rus; 41-3545

## Absorption

- See: Attenuation; Light transmission; Radiation absorption; Turbidity

## Accessibility

- See: Site accessibility

## Accidents

- Characteristics of the casualties due to snow in the snowy areas. Kuriyama, H., 1986, p.79-94, jpn; 41-81
- Modification of sounding methods in organized search for avalanche victims. Telmon, L., 1986, p.64-69, ita; 41-2239
- Accidents and damage due to avalanches in the Swiss Alps. Etter, H.-J., 1986, p.107-161, ger; 41-2293
- Avalanche accidents outside the Swiss Alps. Gliott, S., 1986, p.162-171, ger; 41-2294
- Collection of case histories of avalanche accidents, 1984, var.p., eng; 41-3243
- Avalanche accidents in the Alps; variations during the decade 1975-1985. Valla, F., 1987, p.3-14, fre; 41-3417
- Skiing accidents due to meteorological conditions. Rey, L., 1987, p.15-24, fre; 41-3418
- See also: Safety

## Acclimatization

- Induction of freezing tolerance in embryonic culture of *Brassica napus*. Orr, W., et al, 1986, p.23-32, eng; 41-2225

## Adaptation of boreal plants to Arctic conditions.

- Borisovskaya, G.M., et al, 1986, p.15-22, rus; 41-2599
- Mechanisms of birch adaptation to conditions of the North. Ermakov, V.I., 1986, 144p., rus; 41-2751
- Antifreeze glycoproteins from polar fish blood. Feeney, R.E., et al, 1986, p.59-78, eng; 41-3165
- Effect of a freeze-thaw cycle on properties of microsomal membranes from wheat. Borochov, A., et al, 1987, p.131-134, eng; 41-4178
- See also: Cold tolerance; Introduced plants

## Accretion

- See: Ice accretion

## Accumulation

- See: Snow accumulation

## Acoustic measurement

- Non-resonant acoustic projector (NRAP) for low frequency studies. Burke, S.P., et al, 1985, p.454-459, eng; 41-227
- Acoustic noise measurements of icebergs. Miller, J.D., et al, 1985, p.460-463, eng; 41-228
- Acoustic array sensor tracking system. Von der Heydt, K., et al, 1985, p.464-471, eng; 41-229
- Acoustic navigation in research and production situations. Hakala, H., 1986, p.145-161, eng; 41-1094
- Ice cover thickness measurements in the Arctic Ocean. McLaren, A.S., et al, 1986, p.225-235, eng; 41-2661
- Kinetic energy ice penetrating tactical sonobuoy. Everett, R.N., et al, 1986, p.521-547, eng; 41-2675
- Sea ice thickness distribution in the Arctic Ocean. Bourke, R.H., et al, 1987, p.259-280, eng; 41-3037

- Analysis of acoustical features of laboratory grown sea ice. Stanton, T.K., et al, 1986, p.1486-1494, eng; 41-3068

- Grand Banks ice-scur catalogue. Schoenthaler, L., 1986, p.200-203, eng; 41-3111

- Seismo-acoustic studies of frozen and thawed calcareous clays. Voronkov, O.K., et al, 1985, p.88-95, rus; 41-3129

- Close range ice hazard detection: Phase 2. De Heering, P., et al, 1987, 67p. + appenda. (2 vols.), eng; 41-3226

- Use of acoustics in localizing under-ice oil spills. Francois, R.E., et al, 1983, 17p., eng; 41-3927

- Acoustic survey and glacial history of Adams Lake, Labrador. Bell, T., et al, 1987, p.101-110, eng; 41-4011

- Acoustic tomography in the marginal ice zone. Lynch, J.F., et al, 1987, p.6869-6885, eng; 41-4244

## Acoustics

- Effect of snow on vehicle-generated seismic signatures. Albert, D.G., 1987, p.881-887, eng; 41-3887

- See also: Ice acoustics; Noise (sound); Snow acoustics; Sound transmission; Underwater acoustics

## Active layer

- Improving thermal regime of meadow soils. Strel'tsova, V.S., et al, 1985, p.14-26, rus; 41-255
- Agricultural development of landscapes containing ground ice in Central Yakutia. Turbina, M.I., 1985, p.31-42, rus; 41-257
- Allowing for frost-effect on soils in foundation design. Sal'nikov, P.I., 1985, p.11-13, rus; 41-278
- Formulas for calculating horizontal forces produced by thawing ground. Bondarenko, G.I., 1985, p.53-55, rus; 41-302
- Influence of suprapermafrost ground waters on the active layer. Pichuev, V.V., 1985, p.86-87, rus; 41-317
- Waterproofing interlayers for the improvement of water- and thermal regime of roadbeds. Ruvinskii, V.I., et al, 1985, p.23-24, rus; 41-302
- Dynamics of periglacial sorted circles in western Spitsbergen. Hallet, B., et al, 1986, p.81-99, eng; 41-792

- Artificial freezing of ground between permafrost and the active layer. Aleksandrov, I.U.A., 1986, p.7-8, rus; 41-911

- Meadow-thermozem cryogenic soils of the Buryat SSR. Kulikov, A.I., et al, 1986, 137p., rus; 41-1045

- Productivity of forest phytocenoses. Elagin, I.N., ed, 1984, 149p., rus; 41-1078

- Climatic influence on trees in permafrost areas. Dashkovskaya, I.S., et al, 1984, p.49-56, rus; 41-1079

- Detection of high altitude permafrost, Jotunheimen, Norway. Harris, C., et al, 1986, p.19-26, eng; 41-1184

- Forms of vascular plants in the southern tundra subzone of Taymyr. Polozova, T.G., 1986, p.122-134, rus; 41-1337

- Forestry in permafrost regions. Pozdniakov, L.K., 1986, 192p., rus; 41-1343

- Swamp stability equations for taiga. Geleta, I.F., 1986, p.49-57, rus; 41-1366

- Some modeling problems related to the theory of nalds. Dement'eva, O.V., 1982, p.162-165, rus; 41-1443

- Snow cover effect on some cryogenic processes in the BAM zone. Poznanin, V.L., 1986, p.125-128, rus; 41-1652

- Progress in pedology. Contributions of Soviet pedologists to the 13th International Congress of Pedologists, Hamburg, 1986. Kovda, V.A., ed, 1986, 270p., rus; 41-1743

- Salt transfer processes in cryogenic soils. Panin, P.S., et al, 1986, p.245-250, rus; 41-1745

- Man-induced erosion in Bol'shezemel'skaya tundra. Zharkova, I.U.G., 1986, p.94-98, rus; 41-1794

- Yeasts from Arctic East Siberian tundra. Golubev, V.I., 1986, p.609-612, rus; 41-1825

- Formulas for calculating deformation modulus of frozen ground. Slaschilin, O.A., 1986, p.8-9, rus; 41-1883

- Thermal melioration of ground by late-fall loosening. Stafeyev, P.F., 1986, p.4-5, rus; 41-1886

- Geocryological characteristics of mountainous countries in Asia. Truh, N.I., 1986, p.99-108, rus; 41-2089

- Formation of segregated ice and frost heave of clays. Zamolotchikova, S.A., 1986, p.127-136, rus; 41-2093

- Cryogenic structure of active layer rocks in Yamal Peninsula. Ershov, E.D., et al, 1986, p.149-162, rus; 41-2095

- Field studies of stresses in freezing ground in the active layer. Lebedenko, I.U.P., et al, 1986, p.163-169, rus; 41-2096

- Sagging of thawing clayey grounds of different consistency. Khrustalev, L.N., et al, 1986, p.169-172, rus; 41-2097

- Mixed-grass-edge tundra soils of Wrangel Island. Orlovskii, S.-D.D., 1986, p.98, rus; 41-2460

- Perennially frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation. Tong, B., et al, 1986, p.66-78, rus; 41-2541

- Development and application of an upland boreal forest succession model. Moorhead, D.L., 1985, 170p., eng; 41-2584

- Structural-functional interrelationships and productivity of phytocenoses. Buzynkin, A.I., ed, 1983, 140p., rus; 41-2746

- Estimating the productivity of stands in the lower Angara River area. Atkin, A.S., 1983, p.47-52, rus; 41-2747

- Radial growth of conifers in different Angara River forest areas. Dashkovskaya, I.S., 1983, p.82-94, rus; 41-2748

- Formation of frozen rocks and forecasts of cryogenic processes. Kaplina, T.N., ed, 1986, 228p., rus; 41-2813

- Waters in active layers and nald formation. Poznanin, V.L., 1986, p.142-147, rus; 41-2832

- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed, 1986, 165p., rus; 41-2912

- Permafrost rocks of the Tsinkhai-Sizan plateau of Tibet and their formation conditions. Tong, B., et al, 1986, p.68-79, eng; 41-3017

- New aquatic tundra plants. Vekhov, N.V., et al, 1986, p.1619-1620, rus; 41-3024

- Forest fire effect on tundra vegetation. Polozova, T.G., 1986, p.1657-1663, rus; 41-3025

- Life upon the permafrost. Bruemmer, F., 1987, p.30-39, eng; 41-3148

- Changes in the active layer with changes in forest cover in Yakutia. Stashenko, A.I., 1986, p.194-199, eng; 41-3199

- Geocryology of the Schirmacher Hills. Vtiurin, B.I., 1986, p.200-212, eng; 41-3200

- Regionalization of the Yakut ASSR for determining depths of placing geodetic markers. Bogdanov, B.G., 1986, p.30-31, rus; 41-3213

- Interactions between "cold" gas pipelines and freezing ground. Mironov, N.G., et al, 1986, p.42-43, rus; 41-3976

- Revegetation of cleared areas in pine forests of southern Priob'e under conditions of increased human activities. Bekh, I.A., 1985, p.4-11, rus; 41-3980

- Air-convection cooling devices. Kononov, A.A., 1983, p.71-77, rus; 41-4476

- New information on rock streams. Shvetaov, P.F., et al, 1983, p.103-105, rus; 41-4485

## Adhesion

- Snowflake aggregation near the melting layer in stratiform clouds. Newman, S.B., 1982, p.381-383, eng; 41-40

- Effect of temperature variations on the bonding of concrete overlays. Dhir, M.P., 1984, p.172-179, eng; 41-2073

- Adfreezing of the materials of skis' sliding surfaces to snow and ice. Ermakov, K.K., 1984, p.10-12, rus; 41-4506

- Derivation of the polymer-snow friction coefficient. Ermakov, K.K., 1984, p.12-15, rus; 41-4507

- See also: Ice adhesion

## Admixtures

- Variation of sulfate content in Arctic atmospheric precipitation during the last 90 years. Astratov, M.I.U., et al, 1986, p.38-42, eng; 41-1690

- Method of preparing snow and ice control compositions. Stockel, R.F., 1983, 6 col., eng; 41-1776

- Calculational method for determination of carburetor icing rate. Nazarov, V.I., et al, 1985, p.544-546, eng; 41-2944

- See also: Cement admixtures; Concrete admixtures

- Adsorption**  
Conditions for crack propagation by frost wedging. Tharp, T.M., [1987, p.94-102, eng] 41-4210
- Adventive plants**  
See: Introduced plants
- Aeration**  
Aerodynamics of road embankments (a discussion). Ivanov, V.D., [1985, p.25-26, rus] 41-503
- Aerial surveys**  
Surface velocity determination on large polar glaciers by aerial photogrammetry. Brecher, H.H., [1986, p.22-26, eng] 41-412  
Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed, [1986, 84p., rus] 41-543  
Mapping of Soler Glacier, Chile. Aniya, M., et al, [1986, p.8-10, eng] 41-729  
Geophysical exploration methods in the Arctic. Gaponenko, G.I., ed, [1978, 165p., rus] 41-998  
Allowing for variations in electromagnetic surveys of the Arctic Basin. Karasik, A.M., et al, [1978, p.83-92, rus] 41-999  
Aeromagnetic surveys in Arctic shelf seas. Palamarchuk, V.K., et al, [1978, p.129-133, rus] 41-1001  
Recent glacier oscillations in China. Zhang, X., [1986, p.99-105, 217-223, eng] 41-1061  
Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al, [1986, p.37-49, rus] 41-1537  
Some results and prospects for studying mass balance of glaciers (according to materials of a Hamburg seminar in 1983). Kotliakov, V.M., et al, [1986, p.179-193, rus] 41-1666  
Evaluating the information content of satellite data on snow line altitude for forecasting runoff of mountain rivers in the Fergana Basin. Tsarev, B.K., [1986, p.40-50, rus] 41-1685  
Permafrost distribution and temperature from aerial surveys and spaceborne photography. Gavrilov, A.V., [1986, p.58-76, rus] 41-2086  
Prediction of the occurrence of thin ice features. Farmer, L.D., et al, [1986, p.207-223, eng] 41-2660  
Topographic analysis of the lower Kolyma River for cryolithologic mapping. Kaplina, T.N., et al, [1986, p.51-60, rus] 41-2819  
Automated highway design. Fedotov, G.A., [1986, 317p., rus] 41-2861  
Glacier inventory of the province of Bolzano. Valentini, P., [1985, p.182-195, ita] 41-3186  
Landsat multispectral images of Antarctica applied to mapping and glaciology. Lucchitta, B.K., et al, [1985, p.256-259, eng] 41-3327  
Geologic indication of ground ice in Tien Shan and Pamir. Ermolin, E.D., [1986, p.22-29, rus] 41-3483  
Satellite methods of studying nelds. Abakumenko, A.E., [1986, p.94-99, rus] 41-3521  
Aerial surveys over the Patagonia Icefields. Aniya, M., [1987, p.157-161, eng] 41-3841  
Iceberg study, Sagalek, Labrador. Allen, J.H., [1973, 92p., eng] 41-3961  
Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, [1984, 193p., rus] 41-4086  
Hydromeliorative regionalization of West Siberia from space photographs. Gorozhankina, S.M., [1984, p.16-25, rus] 41-4087  
Observation of sea ice using the 36-GHz surface contour radar. Fedor, L.S., et al, [1987, p.393-402, eng] 41-4174  
Remote sensing in the Ross Ice Shelf region. Bentley, C.R., et al, [1987, p.20-29, eng] 41-4429  
Airborne radio echo-sounding in Shirase Glacier basin. Mae, S., et al, [1987, p.160-165, eng] 41-4451  
Studies of migration frost mounds with the use of multiband aerial photographs. Gromova, E.I., [1983, p.142-150, rus] 41-4612  
See also: Infrared reconnaissance; Spaceborne photography
- Aerodynamic test facilities**  
See: Wind tunnels
- Aerosols**  
Removal processes of aerosols in ice fog. Ohtake, T., et al, [1982, p.57-60, eng] 41-3  
Contact ice nucleation by submicron atmospheric aerosols. Deshler, T., [1982, p.111-114, eng] 41-9  
Ice nucleus measurement. Schnell, R.C., et al, [1982, p.119-122, eng] 41-11  
Storage effects on ice-forming nuclei measurements. Braham, R.R., Jr., et al, [1982, p.127-130, eng] 41-13  
Analysis of silver in individual ice particles after cloud seeding. Nagamoto, C., et al, [1982, p.378-380, eng] 41-39  
Aerosol ice-forming activation mechanism. Gzirishvili, T.G., [1985, p.309-314, eng] 41-215  
Air chemistry observations in the Canadian Arctic. Hoff, R.M., et al, [1986, p.97-107, eng] 41-348  
Problems of chemical defence operations in extreme cold. Stearman, R.L., [1985, 10, 1 2 append., eng] 41-477  
Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples. Kerimov, A.M., et al, [1985, p.71-78, rus] 41-846  
Interaction of clouds with the surrounding aerosol medium. Mazin, I.P., [1982, p.42-48, eng] 41-1006  
Studying vertical distribution of ice-forming nuclei. Khusid, S.V., et al, [1986, p.85-89, rus] 41-1452  
Photostimulated ice-forming activity centers in silver iodide aerosols. Oleinik, R.V., [1986, p.93-97, rus] 41-1453  
Structural anomalies in ice-forming silver iodide aerosols. Borovoi, N.A., et al, [1986, p.97-99, rus] 41-1454  
Collection of aerosol particles by snow crystals. Wang, P.K., et al, [1985, p.171-176, eng] 41-1493  
Aerosol exchange in the remote troposphere. Hogan, A.W., [1986, p.197-213, eng] 41-1751  
Balloon observation of aerosols in the antarctic troposphere and stratosphere. Ito, T., et al, [1986, p.214-222, eng] 41-1752  
Aerosol measurements at the South Pole. Bodhaine, B.A., et al, [1986, p.223-235, eng] 41-1753  
Antarctic precipitation chemistry. Delmas, R.J., [1986, p.249-266, eng] 41-1843  
Heterogeneous nucleation of ice on aerosol nuclei with modified surfaces. Bazzazev, T.V., et al, [1986, p.119-128, rus] 41-1903  
Formation of polar stratospheric clouds. Steele, H.M., et al, [1983, p.2055-2067, eng] 41-2004  
Visible and infrared transmission through snow. Seagraves, M.A., et al, [1983, p.90-93, eng] 41-2316  
Formation of a microscopic ice filament in an electric field. Akiutova, L.K., et al, [1985, p.619-620, eng] 41-2330  
Morphological and chemical data on microparticles in antarctic snows. Goldschmidt, A., [1986, p.99-103, eng] 41-2463  
Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core. De Angelis, M., et al, [1987, p.318-321, eng] 41-2505  
Collection efficiency of charged snow crystals. Murakami, M., et al, [1985, p.1127-1137, eng] 41-2569  
Size dependence of natural aerosol for ice nucleation. Berezninskii, N.A., et al, [1986, p.28-32, rus] 41-2879  
Formation kinetics of ice crystals on aerosol particles in supercooled fog. Effect of water vapor exhaustion. Gorbunov, B.Z., et al, [1986, p.333-334, eng] 41-3162  
Aerosol transport processes in the Antarctic. Hogan, A.W., et al, [1985, p.205-206, eng] 41-3324  
Chemical tests of antarctic hygroscopic aerosols. Ohtake, T., [1985, p.205-210, eng] 41-3325  
Stratospheric aerosol descent in winter and effects on water vapor budget. Iwasaka, Y., [1986, p.13-18, eng] 41-3654  
Aerosol samplers used in size distribution study. Berezninskii, N.A., et al, [1986, p.55-63, rus] 41-3671  
Microstructural characteristics of hailstone embryos. Tisov, M.I., et al, [1986, p.229-237, rus] 41-3672  
Ice-forming characteristics of giant aerosol particles in the atmosphere. El'mesov, M.S., [1986, p.238-248, rus] 41-3673  
Investigation of ice-forming activity of aerosols of copper acetylacetonate in a supercooled two-phase flow. Kim, N.S., et al, [1986, p.21-24, eng] 41-3678  
Aerosol properties in the atmospheric surface layer in Severnaya Zemlya archipelago. Timerev, A.A., [1986, p.108-113, rus] 41-3867  
All-Union Conference on nuclear-physical methods of environmental management, 3rd, Tomsk, May 21-23, 1985. Proceedings, [1987, 172p., rus] 41-3944  
Estimation of industrial emission into the atmosphere. Boiarkina, A.P., et al, [1987, p.14-23, rus] 41-3945  
Chemical properties of snow in the northeastern United States. Kumai, M., [1987, (C)625-(C)630, eng] 41-3959  
Radiative effects of aerosol components in Arctic haze and snow. Blanchet, J.P., et al, [1987, p.293-317, eng] 41-4206  
Aerosol size distribution in the ice edge zone, 1983. Borrmann, S.H., et al, [1987, p.6971-6976, eng] 41-4253  
Nature of ice-forming nuclei in marine air masses. Rosinski, J., et al, [1987, p.291-309, eng] 41-4364  
Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP. Boutroun, C.F., et al, [1987, p.1197-1202, eng] 41-4603  
See also: Smoke generators
- Afforestation**  
See: Revegetation
- Age determination**  
Glacier outlet of the Vatnajökull in the upper course of the Djupa, southern Iceland. Jaksh, K., [1984, p.97-103, ger] 41-805  
Influence of paludification and forest fires on forest development. Glebov, F.Z., et al, [1984, p.133-141, rus] 41-1083  
Compiling dendroclimatograms for distinguishing glaciation conditions. Solomina, O.N., [1986, p.106-112, rus] 41-1648  
Dating exposed rock surfaces in the Arctic by lichenometry. Innes, J.L., [1986, p.253-259, eng] 41-1869  
Effective age of bubbles in polar ice. Enting, I.G., et al, [1985, p.777-790, eng] 41-2111
- Radiocarbon chronology of the last glaciation in McMurdo Sound. Denton, G.H., et al, [1985, p.59-61, eng] 41-2625  
Growth of rock lichens in low-Arctic mountain environment, Labrador. Rogerson, R.J., et al, [1986, p.85-91, eng] 41-2707  
Dendrochronologies of San Rafael and Soler areas, Patagonia. Sweda, T., et al, [1987, p.125-132, eng] 41-3837  
Reconstruction of environmental conditions of the north slope glaciers of the Terskey Ala-Tau Range from dendrologic data. Solomina, O.N., et al, [1987, p.235-242, rus] 41-4153  
See also: Geochronology; Ice dating; Radioactive age determination; Soil dating
- Aggregates**  
Wind tunnel investigation of the riming of model ice crystal aggregates. Rasmussen, R.M., et al, [1984, p.151-155, eng] 41-4380  
See also: Concrete aggregates
- Agriculture**  
Drifting of snow in Northern Kazakhstan. Petropavlovskaya, M.S., et al, [1986, p.67-74, eng] 41-3680
- Air circulation**  
See: Atmospheric circulation
- Air conditioning**  
Mathematical modeling of thermal regime of a building in annual cycle, for fuel economy in heating-cooling of premises. Makhalaia, Zh.I., [1986, p.86-89, rus] 41-905
- Air cushion vehicles**  
"Larus"—hovercraft for the Arctic. Malmberg, S., [1986, p.15, eng] 41-87  
Vehicular transport at McMurdo. Dibbern, J.S., [1986, 31p., eng] 41-638  
Arctic surface warfare hovercraft. Schuler, J.L., [1986, p.355-377, eng] 41-941  
Transportation in northern regions. Derbyshev, A.S., [1986, p.60-63, rus] 41-1203  
AP-1-88 hovercraft in ice operations. Rosquist, K., [1986, p.590-601, eng] 41-2047  
Flowtows—transportation systems for difficult "off-road" terrain. Davis, R.M., et al, [1986, p.679-692, eng] 41-2051  
Air cushion vehicle *Larus* in the Beaufort Sea. Wainwright, J., et al, [1986, p.693-709, eng] 41-2052  
Operation of light air cushion vehicle at McMurdo Sound. Dibbern, J.S., [1987, 139p., eng] 41-2257  
Transportation of heavy blocks on ice-snow roads. Rastorguev, G.A., et al, [1986, p.13-14, rus] 41-2780  
Automatic control system for diesel ventilation aggregates of air-cushion vehicles. Glukhikh, V.G., et al, [1987, p.38-39, rus] 41-3392  
Air cushion vehicle operations in the Arctic. Fancy, S.G., [1982, 27p., eng] 41-4068
- Air entrainment**  
Concretes for high dams. Sudakov, V.B., ed, [1985, 101p., rus] 41-413  
Methods of estimating the efficiency of new surface-active additives. Sudakov, V.B., et al, [1985, p.3-9, rus] 41-414  
New air-entrainment and plastifying admixture for concretes. Berger, T.F., et al, [1985, p.9-13, rus] 41-415  
Concretes with polyfunctional admixtures. Sudakov, V.B., et al, [1985, p.13-17, rus] 41-416  
Melting process in ice-air composite materials. Aoki, K., et al, [1986, p.2138-2144, eng] 41-532  
Reducing the amount of cement and fuel used in the production of prefabricated reinforced concrete. Dvorkin, L.I., [1985, 99p. (Pertinent p.50-69), rus] 41-650  
New compound admixture for highly frost-resistant poured concretes. Sudakov, V.B., et al, [1986, p.15-16, rus] 41-879  
Effects of air entrainment and freeze-thaw cycles on concrete strength. Paillere, A.M., et al, [1986, p.541-562, eng] 41-1153  
Review of the history of atmospheric CO<sub>2</sub> recorded in ice cores. Oeschger, H., et al, [1986, p.89-108, eng] 41-2221  
Calculating frost resistance of concrete used in land reclamation construction. Shlaen, A.G., [1986, p.19-22, rus] 41-2553  
Age distribution of air bubbles trapped in polar ice. Enting, I.G., [1986, p.2841-2854, eng] 41-2576  
Interaction of polymer admixtures with cements in concretes. Kozlova, V.K., et al, [1986, p.59-62, rus] 41-2756  
Concrete strength frost-tested after 4 years and after 28 days. IAnbykh, N.N., [1986, p.36-37, rus] 41-2789  
Studies of pore structure of concretes with air-entrainment admixtures. IAnbykh, N.N., [1987, p.34-35, rus] 41-3614  
Criteria of concrete frost resistance. Dvorkin, L.I., [1986, p.105-109, rus] 41-3665
- Air flow**  
Air-flow windows for the Arctic and sub-Arctic. Neff, P.W., [1986, 54p., eng] 41-250  
Aerodynamics of road embankments (a discussion). Ivanov, V.D., [1985, p.25-26, rus] 41-503

**Air flow (cont.)**

- Ice air interaction theory for migration of marginal ice zone. Chu, P.C., [1986, p.863-883, eng] **41-869**
- Atmospheric boundary layer modification in the marginal ice zone. Bennett, T.J., Jr., et al, [1986, p.13,033-13,044, eng] **41-1861**
- Swinging door particle separator and deicing system. Norris, R.M., et al, [1981, 4 col. + 3 sheets, eng] **41-2370**
- Natural and forced convection in mineral fibre wall insulation. Kohonen, R., et al, [1986, 119p., fin] **41-2522**
- Air flow and particle trajectories around aircraft fuselages. IV: orientation of ice crystals. King, W.D., [1986, p.433-439, eng] **41-3221**
- Observation of the planetary boundary layer in the marginal ice zone. Kellner, G., et al, [1987, p.6955-6965, eng] **41-4251**
- Instability theory of ice-air interaction for the formation of ice edge bands. Chu, P.C., [1987, p.6966-6970, eng] **41-4252**
- Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed, [1983, 123p., rus] **41-4470**
- Air-convection cooling devices. Konovalov, A.A., [1983, p.71-77, rus] **41-4476**
- Air ice interface**  
See: Ice air interface
- Air leakage**  
Vents and vapor retarders for roofs. Tobiasson, W., [1986, 11p., eng] **41-4575**
- Air masses**  
Transport of continental radon. Polian, G., et al, [1986, p.178-189, eng] **41-1750**
- Air pollution**  
Accumulation of airborne trace pollutants by arctic plants and soil. Thomas, W., [1986, p.47-57, eng] **41-344**
- Air chemistry observations in the Canadian Arctic. Hoff, R.M., et al, [1986, p.97-107, eng] **41-348**
- Heliogeophysics and the control of natural environments. Danilova, A.D., ed, [1986, 192p., rus] **41-652**
- Separating the background component of snow pollution near industrial sources. Kerbi, S.B., et al, [1986, p.119-123, rus] **41-653**
- Atmospheric toxic metals in snow and ice. Boutron, C.F., [1986, p.467-505, eng] **41-672**
- Composition of snow in Pacific coastal mountains. McBean, G.A., et al, [1986, p.1161-1164, eng] **41-794**
- Experimental study of the dry deposition of gaseous nitric acid to snow. Johansson, C., et al, [1986, p.1165-1170, eng] **41-795**
- Wintertime wet and dry deposition in northern Michigan. Cadle, S.H., et al, [1986, p.1171-1178, eng] **41-796**
- Traces of Icelandic eruptions in the Greenland Ice Sheet. Hammer, C.U., [1984, p.51-65, eng] **41-804**
- Arctic air pollution: an overview of current knowledge. Barrie, L.A., [1986, p.643-663, eng] **41-828**
- Possible routes of pollution transport to the Arctic. Krasovskaia, T.M., [1986, p.93-96, rus] **41-1645**
- Dry deposition to snow in an urban area. Dasch, J.M., et al, [1986, p.297-308, eng] **41-2478**
- Anthropogenic impact on winter surface albedo. Robinson, D.A., [1985, 398p., eng] **41-2582**
- Fumigation system for study of pollution and cold stress on plants. Lucas, P.W., et al, [1987, p.15-28, eng] **41-2858**
- Scientific-technological progress and the development of northern natural resources. Chistobuev, A.I., et al, [1985, p.42-51, rus] **41-3435**
- Environmental protection in Siberia. Vorob'ev, V.V., [1985, p.52-60, rus] **41-3436**
- Changes in ecosystems of the North due to economic development. Kriuchkov, V.V., [1985, p.76-83, rus] **41-3438**
- Scavenging of atmospheric sulfate by Arctic snow. Davidson, C.I., et al, [1987, p.871-882, eng] **41-3891**
- All-Union Conference on nuclear-physical methods of environmental management, 3rd, Tomsk, May 21-23, 1985. Proceedings. [1987, 172p., rus] **41-3944**
- Estimation of industrial emission into the atmosphere. Boiarkina, A.P., et al, [1987, p.14-23, rus] **41-3945**
- Studying pollutant accumulation in air, snow and vegetation. Kazachevskii, I.V., et al, [1987, p.91-102, rus] **41-3947**
- Chemical properties of snow in the northeastern United States. Kumai, M., [1987, p.(C1)625-(C1)630, eng] **41-3959**
- Regional landscape-geochemical investigations. Nechaeva, E.G., ed, [1986, 159p., rus] **41-4113**
- Radiative effects of aerosol components in Arctic haze and snow. Blanchet, J.P., et al, [1987, p.293-317, eng] **41-4206**
- Firm layer contamination by radioactive fallout. Ambach, W., et al, [1986, p.1173-1176, eng] **41-4360**
- Measurement of the entrapment of sulfur dioxide by rime ice. Lamb, D., et al, [1987, p.1765-1772, eng] **41-4538**
- Spatial distribution of chloride and sulfate in the snow cover in Sapporo, Japan. Suzuki, K., [1987, p.1773-1778, eng] **41-4539**

- Organic compounds in precipitation samples from southern California. Kawamura, K., et al, [1986, p.115-124, eng] **41-4540**
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernen'kova, T.V., [1987, p.147-157, rus] **41-4571**
- Air snow interface**  
See: Snow air interface
- Air soil interface**  
See: Soil air interface
- Air temperature**  
Ice ablation in relation to climatic factors in W. Greenland. Braithwaite, R.J., et al, [1984, p.155-168, eng] **41-632**
- Some relationship between antarctic ice extent and climate. Peng, G., et al, [1983, p.303-309, chi] **41-673**
- Formulas for calculating air temperature and global radiation over glaciers. Konovalov, V.G., et al, [1986, p.71-80, rus] **41-777**
- Seasonal ice extent on the northeast Newfoundland Shelf. Symonds, G., [1986, p.10,718-10,724, eng] **41-1011**
- Relationship between salt weathering debris production and temperature. Davison, A.P., [1986, p.335-341, eng] **41-1778**
- Structure of polar lows over the Norwegian and the Barents Seas. Shapiro, M.A., [1986, p.79-90, eng] **41-1800**
- Modeling high-velocity winds and low air temperature over seas. Koshinskii, S.D., et al, [1986, p.90-107, rus] **41-1972**
- Formation of polar stratospheric clouds. Steele, H.M., et al, [1983, p.2055-2067, eng] **41-2004**
- Temporal air-temperature structure in the Antarctic. Donina, S.M., [1981, p.40-44, rus] **41-2011**
- Wind and temperature regime on Adélie Land slopes. Kodama, Y., et al, [1986, p.6735-6741, eng] **41-2141**
- Prediction of vessel icing. Overland, J.E., et al, [1986, p.1793-1806, eng] **41-2845**
- Micro-meteorological conditions for snow melt. Kuhn, M., [1987, p.24-26, eng] **41-3592**
- Crystal structure of ice accreted on an ice substrate. Nasello, O.B., et al, [1987, p.120-122, eng] **41-3604**
- Characteristics of precipitation and vertical structure of air temperature in the northern Patagonia. Fujiyoshi, Y., et al, [1987, p.15-23, eng] **41-3823**
- Cooling of water and air by melting ice. Fujiyoshi, Y., et al, [1987, p.97-102, eng] **41-3833**
- Thermobaric and ice conditions, South Orkney region. Petrov, L.S., et al, [1986, p.59-65, eng] **41-3950**
- Small-scale interaction between atmosphere and ocean at Maud Rise. Makshtas, A.P., et al, [1986, p.67-71, rus] **41-4189**
- Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed, [1983, 123p., rus] **41-4470**
- Air water interactions**  
Climatic cycles as reflected in ice conditions of northern seas. Girdiuk, G.V., et al, [1986, p.122-127, rus] **41-119**
- Boundary layer studies at Terra Nova Bay. Bromwich, D.H., [1986, p.13-16, eng] **41-1073**
- Using satellite data for calculating ocean-atmosphere heat transfer in the Newfoundland energy-active oceanic zone in winter. Rzhaplinskii, D.G., et al, [1986, p.32-41, rus] **41-1540**
- Modeling high-velocity winds and low air temperature over seas. Koshinskii, S.D., et al, [1986, p.90-107, rus] **41-1972**
- Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship. Makshtas, A.P., et al, [1986, p.139-145, eng] **41-3265**
- Studying sea-atmosphere interactions during the cold season. Bogorodskii, P.V., et al, [1986, p.151-157, eng] **41-3267**
- Soviet-American field experiment "Weddell-POLEX-81". Sarukhanian, E.I., [1986, p.9-18, rus] **41-4182**
- Meso- and macro-scale air-sea interaction processes in the South Atlantic Ocean. Vasil'ev, V.F., et al, [1986, p.62-67, rus] **41-4188**
- Interaction between subtropical high and polar ice in Northern Hemisphere. Fang, Z., [1987, p.330-335, eng] **41-4487**
- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed, [1984, 24p., rus] **41-4503**
- Role of local heat sources in synoptic activity within the Polar Basin. LeDrew, E.F., [1984, p.309-327, eng] **41-4534**
- Airborne equipment**  
Effectiveness of thermal viewing equipment for ice surveying. Ovsiannikov, V.A., [1985, p.82-83, rus] **41-1406**
- Cloud physics and modification. Zabolotskaia, T.N., ed, [1986, 113p., rus] **41-1447**
- Studying vertical distribution of ice-forming nuclei. Khusid, S.V., et al, [1986, p.85-89, rus] **41-1452**
- Soviet glaciological studies on the eastern ice field in 1984-1985. [1986, p.10-16, rus] **41-1633**
- Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band. Ralzer, V.I.U., et al, [1986, p.29-42, eng] **41-2207**
- Characteristics of Arctic polar stratospheric clouds. Kent, G.S., et al, [1986, p.2149-2161, eng] **41-2550**

- Airborne observations of terrestrial surfaces. Egan, W.G., [1986, p.501-510, eng] **41-3988**
- Airborne radar**  
Iceberg detection by airborne radar. [1986, 235p., eng] **41-275**
- Errors in measuring ice thickness by airborne radar. Bogorodskii, V.V., et al, [1985, p.660-662, eng] **41-1042**
- Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, [1986, p.1-12, eng] **41-1469**
- Radar wave observations and the Norwegian Sea storm, Feb. 1984. Ross, D., et al, [1986, p.285-296, eng] **41-1811**
- Glaciogeophysical survey of the Ross Embayment, 1984-1985. Bentley, C.R., et al, [1985, p.63-64, eng] **41-2626**
- Cluster analysis of airborne-radar images of ice covers. Asmus, V.V., et al, [1986, p.64-72, rus] **41-2718**
- Ergonomic evaluation of STAR-VUE and NAV-ICE. McAvoy, G., et al, [1986, 130p. + appends., eng] **41-3365**
- Interpretation of radar altimeter wave forms from Arctic ice caps. Drinkwater, M.R., et al, [1987, p.60-68, eng] **41-4436**
- Aircraft**  
See: Airplanes
- Aircraft icing**  
Spectra and liquid water content in aircraft icing environments. Glass, M., [1982, p.400-403, eng] **41-43**
- Characteristics of icing conditions in wintertime stratiform clouds. Politovich, M.K., [1982, p.404-407, eng] **41-44**
- Microphysical influences on aircraft icing. Politovich, M.K., [1982, p.420-422, eng] **41-47**
- M.I.T. ice detector taxis for takeoff. Iversen, W.R., [1986, p.36, 38, eng] **41-260**
- Helicopter Icing Spray System (HISS) evaluation and improvements. Belte, D., et al, [1986, 148p., eng] **41-454**
- National aircraft icing technology plan. Barney, W.S., [1986, 47p. + append., eng] **41-478**
- Correlation of icing relationships with airfoil and rotorcraft icing data. Flemming, R.J., et al, [1986, p.737-743, eng] **41-802**
- Engineering program on anti-deicing of the RAST track. Boston, D.A., [1986, p.201-214, eng] **41-933**
- Methods of numerical mapping of zones of intensive convection, clear-air turbulence, and icing. Abramovich, K.G., et al, [1985, p.3-15, rus] **41-1195**
- Using image recognition in classifying conditions of icing. Gorlach, I.A., [1985, p.62-71, rus] **41-1196**
- Anti-icing and deicing-defrosting fluids. [1985, 13p., eng] **41-1762**
- Microwave ice prevention system. Hansman, R.J., Jr., [1982, 4 col., eng] **41-1995**
- Lightweight heater tape for shuttle propellant tank. Spencer, D.J., et al, [1986, 51p., eng] **41-2070**
- Detection of aircraft icing using microwave radiometers. Popa Fotino, I.A., et al, [1986, p.975-982, eng] **41-2302**
- Helicopter deicer control system. Adams, L.J., [1981, 18 col. + 7 sheets, eng] **41-2368**
- Deicing system. Holwerda, S.J., [1980, 12 col. + 3 sheets, eng] **41-2371**
- Nose-torque electro-impulse deicing systems. Sandorff, P.E., [1984, 10 col. + 4 sheets, eng] **41-2496**
- Pneumatic deicer and deicing method. Ely, D.N., et al, [1983, 6 col. + figs., eng] **41-2498**
- Device for controlling ice formation on contoured surfaces. Cattaneo, C.J., et al, [1985, 6 col. + 3 sheets, eng] **41-2499**
- Determination of surface temperature of anti-iced axial compressor inlet guide vane. Osipov, V.N., [1985, p.56-60, eng] **41-2943**
- Rotorcraft icing technology—an update. Ward, R., et al, [1983, p.(8)1-(8)15, eng] **41-3231**
- Potential flow analysis of glaze ice accretions on an airfoil. Zaguli, R.J., [1984, 87p., eng] **41-3254**
- Effects of simulated ice on the performance of an airfoil. Zaguli, R.J., et al, [1984, 183p., eng] **41-3255**
- Ground aircraft deicing technology review. Mayer, D., et al, [1986, var.p., eng] **41-3378**
- Experimental study of fluid deicing system. [1983, 152p., eng] **41-3379**
- Natural rotor icing on Mount Washington, New Hampshire. Itagaki, K., et al, [1986, 62p., eng] **41-3480**
- Ice and fog: detection and warning systems. December 1985-November 1986 (citations from the NTIS database). [1986, 33p., eng] **41-4128**
- NASA's aircraft icing analysis program. Shaw, R.J., [1986, 26p., eng] **41-4157**
- Role of ice crystals on ice accretion processes. Gayet, J.F., et al, [1984, p.737-740, eng] **41-4415**
- Wintertime, supercooled cloud variables up to 3 km a.g.l. Jeck, R.K., [1984, p.741-744, eng] **41-4416**
- Rotorcraft icing—progress and potential. [1986, 128p., eng] **41-4583**
- Aircraft landing areas**  
State-of-the-art of ground aircraft deicing technology. Mayer, D., [1986, 13p., eng] **41-1354**

- Concrete pavers for aircraft pavement surfaces. Emery, J.A., [1986, p.609-623, eng] 41-1546
- Scheduled Arctic helicopter operations. Oxholm, O., [1986, p.295-320, eng] 41-2033
- Experiences with High Arctic offstrip aircraft operations. Doyle, P., [1986, p.495-511, eng] 41-2041
- Resistance of concrete pavements to frost, and chemical deicing agents. Plahn, J., et al, [1987, p.87-92, ger] 41-3547
- Casey snow runway data report, 1983-84. Russell-Head, D.S., et al, [1984, 98p., eng] 41-4526
- Casey snow runway tests, 1983-84. Russell-Head, D.S., et al, [1984, 111p., eng] 41-4527
- Casey snow runway meteorological records, 1984. Russell-Head, D.S., et al, [1987, 98p., eng] 41-4528
- See also: Ice runways; Runways
- Airplanes**
- Air and ice road transportation to support northern mines. Tamblin, H., [1986, p.368-375, eng] 41-2036
- Aircraft support of research in Antarctica. Bresnahan, D.M., [1986, p.473-494, eng] 41-2040
- Airports**
- Airfield pavement evaluation, Anchorage, Alaska. Alexander, D.R., [1986, 36p. + figs, eng] 41-524
- Urea compound, shotcrete. [1979, 7p., eng] 41-1759
- Urea compound, powder. [1979, 7p., eng] 41-1760
- Deformation of pavements during freeze thaw cycles. Johnson, T.C., et al, [1986, 138p., eng] 41-2549
- Freeze thaw tests of road and airfield subgrade soils. Cole, D.M., et al, [1987, 36p., eng] 41-2942
- Frost action on roads and airfields. Johnson, T.C., et al, [1986, 45p., eng] 41-3143
- Measurement and maintenance of runway friction at Canadian airfields. Argue, G.H., et al, [1987, p.949-979, eng] 41-4049
- Airport pavement distress in cold regions. Vinson, T.S., et al, [1987, p.981-1012, eng] 41-4050
- Rigid surfaces for roads and airports. Glushkov, G.I., et al, [1987, 255p., rus] 41-4151
- Alasay**
- Environmental protection in Central Yakutia (Collection of scientific papers). Vozin, V.F., ed, [1985, 143p., rus] 41-253
- Hydrochemical regime of lake and suprapermfrost ground water in alasay. Shishkina, N.P., [1985, p.110-130, rus] 41-258
- Hydrologic investigations of landscapes. Bachurin, G.V., ed, [1986, 208p., rus] 41-1365
- Alasay as indicators of soil moisture. Bosikov, N.P., [1986, p.80-85, rus] 41-1370
- Methods of forest interpretation on texture-selective images. Kravtsova, V.I., [1986, p.55-66, rus] 41-2304
- Topographic analysis of the lower Kolyma River for cryolithogenic mapping. Kaplina, T.N., et al, [1986, p.51-60, rus] 41-2819
- Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, [1987, 144p., rus] 41-2983
- Albedo**
- Snow physics, avalanches, mudflows. Bolov, V.R., ed, [1985, 108p., rus] 41-836
- Calculating sums of global radiation on mountain slopes. Samukashvili, R.D., [1985, p.78-89, rus] 41-847
- Sea ice concentration from AVHRR imagery. Yamanouchi, T., et al, [1986, p.89-102, eng] 41-979
- Snow melt and surface albedo in the Arctic Basin. Robinson, D.A., et al, [1986, p.945-948, eng] 41-1215
- Cloud/cryosphere interactions in the marginal snow and ice zones. Barry, R.G., [1984, p.605-607, eng] 41-2009
- Climate simulation and change: a simple energy balance climate model. Goldenberg, S.D., [1985, 212p., rus] 41-2579
- Anthropogenic impact on winter surface albedo. Robinson, D.A., [1985, 398p., eng] 41-2582
- Variable effects on spectral response of simulated balsam fir canopies. Ranson, K.J., et al, [1986, p.649-658, eng] 41-2739
- Study of atmospheric radiative transfer process with Arctic application. Tsay, S.-C., [1987, 266p., eng] 41-3799
- Albedo and heat balance of oil-polluted ice-snow surfaces. Izmailov, V.V., et al, [1986, p.117-120, rus] 41-3869
- Twenty years of short-wave radiation observations. Marshunov, S., [1986, p.8-16, eng] 41-3949
- Modelling of continental and sea ice as part of climate models. Nagurnyi, A.P., [1986, 104p., rus] 41-4092
- Problems of determining snow albedo for the High Arctic. Dubreuil, M.A., et al, [1984, p.379-386, eng] 41-4535
- Algae**
- Some ecological observations on antarctic ice algae. Zhang, K., et al, [1986, p.49-59, chi] 41-399
- Formation of the ice algae layer in antarctic sea ice. Zhang, K., et al, [1986, p.60-65, chi] 41-400
- Ice algae in sea ice near Davis Station, Antarctica. Yu, J., et al, [1986, p.66-71, chi] 41-401
- Dominant diatom in the sea ice near Davis Station. Zhang, K., et al, [1986, p.72-75, chi] 41-402
- Identification of phytoplankton pigments in waters near Davis Station. Li, B., et al, [1986, p.110-115, chi] 41-403
- Nanoplankton in the waters near Davis Station. Mao, X., et al, [1986, p.130-135, chi] 41-404
- Lipids of the antarctic sea ice diatom *Nitzschia cylindrus*. Nichols, P.D., et al, [1986, p.1649-1653, eng] 41-614
- Melting history of Antarctica during the past 60,000 years. Labeyrie, L.D., et al, [1986, p.701-706, eng] 41-616
- Botany of Bouvet Island. [1986, 79p., eng] 41-915
- Algal vegetation of Bouvet Island. Klaveness, D., et al, [1986, p.65-69, eng] 41-922
- Algo flora of the lower Yama River (Magadan Region). Kuz'min, G.V., [1986, p.513-521, rus] 41-991
- Algal groupings in Alpine steppes of northeastern Asia. Pivovarova, Zh.F., [1986, p.521-527, rus] 41-992
- Biomass of Alpine tundra of Putorana Plateau. Deeva, N.M., [1986, p.789-794, rus] 41-1003
- Development of soil algae in felled areas of northern taiga. Antipina, G.S., [1986, p.794-798, rus] 41-1004
- Benthic microalgal standing stock distribution patterns at McMurdo Sound. Dayton, P.K., et al, [1986, p.207-213, eng] 41-1015
- Inshore seasonal changes in diatoms near Davis Station. Everitt, D.A., et al, [1986, p.3-12, eng] 41-1173
- Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al, [1984, p.159-165, eng] 41-1280
- Southern tundras of Taymyr. Chernov, I.U.I., ed, [1986, 208p., rus] 41-1331
- Soil algae in southern tundras of Taymyr. Sdobnikova, N.V., [1986, p.68-79, rus] 41-1333
- Nutrient limitation of sea ice microalgae. Maestrini, S.Y., et al, [1986, p.969-982, eng] 41-1473
- Photosynthetic adaptation of sea ice microalgae in Hudson Bay. Legendre, L., et al, [1986, p.321-326, eng] 41-1554
- Antarctic stream ecosystems: variability in environmental properties and algal community structure. Howard-Williams, C., et al, [1986, p.511-544, eng] 41-1558
- Microalgal carbon assimilation in sea ice of East Antarctica. McConville, M.J., et al, [1985, p.135-141, eng] 41-1629
- Benthos in the experimental bays of the Ob' River below Novosibirsk. Blagovidova, L.A., et al, [1985, p.66-72, rus] 41-1832
- Primary production in the Bratsk reservoir. Part 2. Assimilation of carbon by phytoplankton. Pautova, V.N., et al, [1986, p.50-58, rus] 41-1834
- Life and living conditions of the Barents Sea benthos. Matishov, G.G., ed, [1986, 220p., rus] 41-1901
- Nutrient fluxes during extended blooms of Arctic ice algae. Cota, G.F., et al, [1987, p.1951-1962, eng] 41-2254
- Soil algae of pine forests and felled areas in Northern Karelia. Antipina, G.S., [1986, p.182-189, rus] 41-2380
- Photosynthesis and carbon metabolism of phytoplankton from McMurdo Sound. Pt. I. Rivkin, R.B., et al, [1987, p.249-259, eng] 41-2504
- Wilkes Land Expedition 1985: biological observations in the ice-edge zone. Garrison, D.L., et al, [1985, p.123-124, eng] 41-2954
- Ice nucleation activity of antarctic marine microorganisms. Parker, L.V., et al, [1985, p.126-128, eng] 41-2955
- Ecology of sea ice microbial communities of McMurdo Sound. Kottmeier, S.T., et al, [1985, p.128-130, eng] 41-2956
- Photoadaptive strategies in a natural population of *Phaeocystis pouchetii* in McMurdo Sound. Palmisano, A.C., et al, [1985, p.133-134, eng] 41-2957
- Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses. Rivkin, R.B., et al, [1985, p.146-147, eng] 41-2960
- Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover. McGrath Grossi, S., et al, [1987, p.153-164, eng] 41-3131
- Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microalgal communities. Palmisano, A.C., et al, [1987, p.165-173, eng] 41-3132
- Bacterial production in annual sea ice in McMurdo Sound. Kottmeier, S.T., et al, [1987, p.175-186, eng] 41-3133
- Environmental and photosynthetic relationships in antarctic sea ice algae. Palmisano, A.C., et al, [1987, p.299-306, eng] 41-3146
- Could the water reddening of Lake Tovel (Trentino, Italy) be related to fluctuations of Alpine glaciers. Paganelli, A., [1985, p.83-88, ita] 41-3177
- Ecology of snow algae. Kawecka, B., [1986, p.407-411, eng] 41-3160
- Ice diatom floras in Arthur Harbor. Krebs, W.N., et al, [1987, p.163-171, eng] 41-3427
- Antarctic ice and rocks. Doake, C.S.M., [1987, p.138-189, eng] 41-3532
- Flora and vegetation of mosses in ice-free areas of Soya Coast and Prince Olav Coast, East Antarctica. Kanda, H., [1986, p.91-100, eng] 41-3567
- Surface chlorophyll *a* distribution in the marginal ice zone, 1984-1985. Fukuda, Y., et al, [1986, p.24-33, eng] 41-3630
- Ice-algae photosynthesis under fast ice at Showa Station. Satoh, H., et al, [1986, p.34-42, eng] 41-3631
- Decomposition of organic matter under fast ice at Lützow-Holm Bay. Matsuda, O., et al, [1986, p.55-66, eng] 41-3632
- Snow algal bloom and habitat at Showa Station. Ishikawa, S., et al, [1986, p.191-197, eng] 41-3635
- Soil nutrient and algal distribution near Showa Station. Akiyama, M., et al, [1986, p.198-201, eng] 41-3636
- Phytoplankton in the marginal ice zone of the Greenland Sea during summer, 1984. Spies, A., [1987, p.195-205, eng] 41-3684
- Phytoplankton in marine sediments of Frobisher Bay. Hsiao, S.I.C., [1987, p.243-251, eng] 41-3685
- Limnology of Garrow Lake, NWT, Canada. Dickman, M., et al, [1987, p.531-549, eng] 41-3854
- Morphological variation in antarctic diatom, genetic analysis. Wood, A.M., et al, [1987, p.42-54, eng] 41-3997
- Intracellular photosynthate allocation and the control of Arctic marine ice algal production. Smith, R.E.H., et al, [1987, p.124-132, eng] 41-3998
- Seasonal variation in phytoplankton and ice algae in shallow coast site. Perrin, R.A., et al, [1987, p.33-46, eng] 41-4084
- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed, [1985, 160p., rus] 41-4118
- Diatomaceous algae in water bodies of the Kolyma Power Plant. Kharitonov, V.G., [1985, p.91-103, rus] 41-4121
- Humic substances from a blue lake on the Greenland ice cap. Gadel, F., et al, [1987, p.107-109, eng] 41-4140
- Ice flora in the central part of the Arctic Ocean. Mel'nikov, I.A., [1986, p.59-62, rus] 41-4197
- Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] 41-4280
- Microorganisms found in N.G. soils, snow cover and streams. Dobrovolskaia, N.G., et al, [1985, p.77-81, rus] 41-4562
- Archaeomonad (Chrysophyta) cysts: ecological and paleoecological significance. Mitchell, J.G., et al, [1986, p.289-298, eng] 41-4609
- Alimentation**
- Hydrologic regime of rivers in inner and central Tien Shan. Muzakeev, M.A., [1984, p.3-9, rus] 41-722
- Ground water runoff into Kirghiz rivers. Ergeshev, A., [1984, p.26-35, rus] 41-724
- Glacier systems in the Soviet northeast. Krenke, A.N., et al, [1980, p.166-185, eng] 41-2343
- Waters in active layers and naled formation. Poznanin, V.L., [1986, p.142-147, rus] 41-2832
- Satellite methods of studying naleds and ground waters of eastern Pamir. Topchiev, A.G., [1986, p.48-58, rus] 41-3391
- Comparing glacio-hydrology of Swiss Alps and Tien Shan. Kang, E., [1986, p.9-18, 130-139, rus] 41-4333
- See also: Glacier alimentation
- All terrain vehicles**
- Transportation in northern regions. Derbyshev, A.S., [1986, p.60-63, rus] 41-1203
- Finland to build ice-breaking cargo ships and snow-going vehicles. [1985, p.100-102, rus] 41-1521
- Problems of snow cover classification when studying its trafficability by different type vehicles. Ushakov, A.I., [1986, p.146-149, rus] 41-1658
- Caterpillar and wheeled hauling-tractors. Platonov, V.F., et al, [1986, 295p., rus] 41-1688
- Role of Soviet academicians during WW2. Kotliakov, V.M., et al, [1986, p.19-25, rus] 41-1819
- CATCO: remote all terrain heavy transportation. Peterson, S., [1986, p.670-678, eng] 41-2050
- Tractive power of walking all-terrain vehicles designed for swamps. Korovitsyn, L.F., et al, [1987, p.22-24, rus] 41-3984
- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed, [1984, 24p., rus] 41-4503
- Methods of studying contact interactions of materials with ice and snow. Igoshin, V.A., et al, [1984, p.3-7, rus] 41-4504
- Alluvium**
- Quantitative estimation of frost heave of different grounds. Shesternev, D.M., [1985, p.78-80, rus] 41-313
- Alluvial diamond discoveries in placer gravels, Crooked Creek, Alaska. Forbes, R.B., et al, [1987, 26p., eng] 41-2241
- Subsurface ice-lens formation by the refreezing of taliks. Gravis, G.F., et al, [1972, p.73-79, rus] 41-3748
- Role of gas-liquid inclusions in cryogenic shattering of quartz. Rogov, V.V., [1987, p.81-85, rus] 41-4169
- Alpine glaciation**
- Regularities governing altitudinal belts of maximum river discharge in Tadzhikistan. Kemmerikh, A.O., [1986, p.166-170, rus] 41-128
- Radiation balance of Pamir slopes. Finaev, A.F., [1986, p.174-180, rus] 41-130
- High altitude flora of northern Tien Shan. Baltenov, M.S., [1985, 231p., rus] 41-551
- Bibliography of alpine and subalpine areas of the Frost Range, Colorado. Halfpenny, J.C., comp, [1986, 14p., eng] 41-697



**Alpine glaciation (cont.)**

- Moraine stratigraphy of Bugaboo Glacier, British Columbia. Osborn, G., [1986, p.171-178, eng] 41-1190
- Soviet glaciological studies in 1985. Kotliakov, V.M., et al, [1986, p.3-10, rus] 41-1632
- Glacio-fluvial sediment transfer. Gurnell, A.M., ed, [1987, 524p., eng] 41-3124
- Satellite monitoring of Alpine glacier fluctuations. Della Ventura, A., et al, [1985, p.150-155, ita] 41-3183
- Permafrost along the Cordillera of North America. Harris, S.A., [1986, p.107-118, eng] 41-3581
- Reconstruction of environmental conditions of the north slope glaciers of the Terskey Ala-Tau Range from dendrologic data. Solomina, O.N., et al, [1987, p.235-242, rus] 41-4153
- Studies of glacial hydrology and burating of glacial lakes. Collins, D.N., [1986, p.114-122, 224-232, rus] 41-4354

See also: Mountain glaciers

**Alpine landscapes**

- Problems of developing natural resources in the northern Urals. Pakhomov, V.P., ed, [1985, 72p., rus] 41-203
- Economic prerequisites for development in the northern Urals. Pakhomov, V.P., [1985, p.3-14, rus] 41-204
- Macroscale model of snow cover formation in mountainous regions. Shetais, I.D., [1986, p.15-27, rus] 41-544
- Seasonal variations in temperatures of subalpine soils. Razumov, V.V., [1985, p.90-102, rus] 41-848
- Photosynthesis of steppe plants in eastern Hangay. Slemnev, N.N., [1986, p.460-473, rus] 41-990
- Differentiation in forest conditions of mountain regions and phytocenotic productivity. Ziganshin, R.A., [1984, p.78-87, rus] 41-1081
- Alpine phytocenotic systems of the Subarctic. Norin, B.N., ed, [1986, 292p., rus] 41-1344
- Natural water bodies as indicators of landscapes. Aseev, V.V., et al, [1986, p.75-80, rus] 41-1369
- Snow runoff of the Transcaucasian highland. Vladimirov, L.A., et al, [1985, p.545-547, rus] 41-1624
- Conditions conducive to glacial mudflow in the Aktru River valley, Altai Mountains, June 24, 1984. Barashkova, N.K., et al, [1986, p.121-124, rus] 41-1651

- Variability of snow cover properties in medium-high mountains. Zhidkov, V.A., et al, [1986, p.150-155, rus] 41-1659
- Introduction of aconites into the Subarctic. Gorelova, A.P., [1986, 116p., rus] 41-1927
- Geocryological characteristics of mountainous countries in Asia. Trush, N.I., [1986, p.99-108, rus] 41-2089
- Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al, [1986, p.72-80, rus] 41-2250
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] 41-2289
- Cryolithozone of central Asia. Gorbunov, A.P., [1986, 57p., rus] 41-2349

- All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks. Novosibirsk, Aug. 26-28, 1986. Summaries, [1986, 165p. rus] 41-2456

- Preliminary results of studying mosses in the "Stolby" and Sayan-Shushenskoye preservation parks. Vasil'ev, A.N., [1986, p.70-72, rus] 41-2457
- Preservation of high-altitude vegetation in the Altai-Sayan Mountains. Sedelnikov, V.P., [1986, p.106-108, rus] 41-2461

- Analysis of endemic species of moss flora in Central Asia. Mamatkulov, U.K., [1986, p.39-49, rus] 41-2777
- Lichens in fir-spruce forests of Sikhote Alin Mountains. Skirina, I.F., et al, [1986, p.111-112, rus] 41-2779

- Radiation and heat regime of some high-mountain biogeocenoses. Kucherenko, V.E., [1986, p.66-86, rus] 41-2880

- All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports. Sokolov, V.E., ed, [1986, 154p., rus] 41-3539

- Peculiarities of microbe associations in the Far North and Pamir highlands. Bab'eva, I.P., et al, [1986, p.12-13, rus] 41-3540

- Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] 41-3742

- Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, [1986, 136p., rus] 41-3805

- Permafrost distribution and slope processes in central Tien Shan. Tarakanov, A.G., [1986, p.98-109, rus] 41-3807

- Microorganisms found in Alpine soils, snow cover and streams. Dobrovolskaia, N.G., et al, [1985, p.77-81, rus] 41-4562

**Alpine soils**

See: Mountain soils

**Alpine tundra**

- High altitude flora of northern Tien Shan. Baftenov, M.S., [1985, 231p., rus] 41-551
- Plants in the Anadyr' River basin. Korobkov, A.A., et al, [1986, p.450-459, rus] 41-989
- Biomass of Alpine tundras of Putorana Plateau. Deeva, N.M., [1986, p.789-794, rus] 41-1003

**Alpine tundra soil microbiology, Front range, CO.**

- Mancinelli, R.L., [1986, p.269-275, eng] 41-1176
- Particle size distribution in patterned ground, Niwot Ridge, Colorado. Rissing, J.M., et al, [1985, p.153-163, eng] 41-1226
- Stratifying alpine tundra for geomorphic studies. Frank, T.D., et al, [1985, p.179-187, eng] 41-1228
- Environmental factors and growth of *Dryas octopetala*, Alaska. McGraw, J.B., [1985, p.229-239, eng] 41-1244
- White spruce in the Brooks Range, Alaska. Cooper, D.J., [1986, p.247-252, eng] 41-1868
- Briophytes in the Polar-Alpine Botanical Garden. Konstantinova, N.A., et al, [1986, p.8-12, rus] 41-2776
- Snow distribution patterns in the alpine krummholz zone. Daly, C., [1984, p.157-175, eng] 41-3139
- Lichen distribution along an alpine tundra ridge in the High Uintas of northeastern Utah, U.S.A. St. Clair, L.L., [1985, 155p., eng] 41-3797

**Altimetry**

See: Height finding

**Altitude**

- Cryolithozone of central Asia. Gorbunov, A.P., [1986, 57p., rus] 41-2349
- Estimating atmospheric refraction over Columbia Glacier. Rasmussen, L.A., [1986, p.61-72, eng] 41-3526
- Aspect and elevation effects on the structure of the seasonal snowcover in Colorado. Dexter, L.L., [1987, 250p., eng] 41-3800
- Radar altimetry delineates ice shelf boundaries and elevations. Zwally, H.J., et al, [1987, p.229-235, eng] 41-4465

**Amphibious vehicles**

- Caterpillar and wheeled hauling-tractors. Platonov, V.F., et al, [1986, 295p., rus] 41-1688

**Analysis (chemistry)**

See: Chemical analysis

**Analysis (mathematics)**

See: Mathematical models; Statistical analysis; Stefan problem; Structural analysis; Systems analysis

**Anchor ice**

See: Bottom ice

**Anchors**

- Pile-foundation supports of power lines in the southern Far East. Tiurin, I.M., [1985, p.63-64, rus] 41-307
- Bulletin of scientific-technical information. Power engineering of Southern Yakutia. Petrov, N.A., ed, [1984, 32p., rus] 41-1829
- Depth of sinking power-line support foundations. Argunov, L.I., [1984, p.11-13, rus] 41-1831
- Ice penetration drill/anchor using ultrahigh-pressure waterjets. Echert, D.C.S., et al, [1986, p.605-617, eng] 41-2679
- Classification of means of ballasting and fastening pipelines. Vasil'ev, N.P., et al, [1986, p.20-21, rus] 41-2782

**Animals**

- Mathematical modelling. Processes in complex economic and ecological systems. Samarskiĭ, A.A., ed, [1986, 295p., rus] 41-547
- Modeling tundra populations and communities. Babikov, E.V., et al, [1986, p.207-219, rus] 41-548
- Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.35. [1985, 440p., eng] 41-1784
- Ecological values along the North Slope portion of the Haul Road. Underwood, L.S., et al, [1978, 40p., eng] 41-2076
- Impact of oilfield development on shorebirds, Prudhoe Bay, Alaska. Meehan, R.H., [1986, 92p., eng] 41-2287

**Antarctica**

- Planned New Zealand antarctic activities 1986-87. [1986, 26p., eng] 41-382
- Modifications to the 1985/86 New Zealand antarctic research program. [1986, 4 leaves, eng] 41-383
- Seventh continent; Antarctica as a resource age. Shapley, D., [1985, 315p., eng] 41-649
- Analysis and simulation of altimeter performance for the production of ice sheet topographic maps. Partington, K.C., et al, [1986, p.141-145, eng] 41-757
- Multispectral digital image mapping of antarctic ice features. Swinbank, C., et al, [1986, p.159-163, eng] 41-761
- JARE 25 wintering party activities, 1984-1985. Hirasawa, T., [1986, p.113-137, jpn] 41-980
- Studying mass balance in the frontal zone of the Filchner-Ronne ice shelf, Antarctica. Kohnen, H., et al, [1986, p.136-139, 251-254, eng] 41-1069
- Antarctic climate research, No.1. [1986, 31p., eng] 41-1071

**Japanese activities on automatic weather observations.**

- Fujii, Y., [1986, p.19-20, eng] 41-1075
- Model of stresses in the Antarctic lithosphere induced by ice loads. Shemenda, A.I., et al, [1986, p.97-102, rus] 41-1166
- Recommendations for a U.S. ice coring program. [1986, 67p., eng] 41-1352
- Geography of marine navigation. Nadochil, G.L., [1985, 263p., rus] 41-1353

**Comments on the antarctic gravity anomaly map.**

- Segawa, J., et al, [1986, p.19-22, eng] 41-1471
- Sea ice and the antarctic winter atmospheric circulation. Mitchell, J.F.B., et al, [1986, p.953-969, eng] 41-1474
- Soviet glaciological studies in 1985. Kotliakov, V.M., et al, [1986, p.3-10, rus] 41-1632
- Polar ice sheets: a wild card in the deck. Jacobs, S.S., [1986, p.50-54, eng] 41-1900
- Science in Antarctica, Vol.9: Data compilation. [1985, 288p., jpn] 41-1918
- Antarctic journal of the United States, Vol.21, No.3. [1986, 24p., eng] 41-2494
- Methods of compiling general radar maps of polar regions. Bondina, T.V., et al, [1986, p.58-63, rus] 41-2717
- Availability of mineral resources in the Antarctic. Roland, N.W., [1986, p.154-163, ger] 41-2921
- Topographic Rossby waves over Antarctica. Egger, J., et al, [1987, p.110-115, eng] 41-3134
- Operation Deep Freeze 87 end of season report. [1987, Var. p., eng] 41-3164
- Area of antarctic ice shelves. Suetova, I.A., [1986, p.213-226, eng] 41-3201
- Development of an automatic geophysical observatory. Doolittle, J.H., et al, [1985, p.229-231, eng] 41-3326
- Landsat multispectral images of Antarctica applied to mapping and glaciology. Lucchitta, R.K., et al, [1985, p.256-259, eng] 41-3327
- Ship operations, 1984-1985. Marthaler, J.G., [1985, p.267-269, eng] 41-3328
- Antarctic science. Walton, D.W.H., ed, [1987, 280p., eng] 41-3531
- Surface topography of large ice masses from Landsat imagery. Dowdeswell, J.A., et al, [1987, p.16-23, eng] 41-3591
- By radio from Antarctica. [1986, p.92-95, rus] 41-4192
- Adélie Coast**
- "IAGO-Katabatic" programme. André, J.C., et al, [1986, p.17-18, eng] 41-1074
- Wind and temperature regime on Adélie Land slopes. Kodama, Y., et al, [1986, p.6735-6741, eng] 41-2141
- Accumulation distribution in Adélie Coast and meteorological parameters. Pettre, P., [1986, p.486-500, eng] 41-4304
- Allan Hills**
- Uranium-series dating of Allan Hills ice. Fireman, E.L., [1985, p.70-71, eng] 41-2630
- American Highland**
- Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, [1986, p.1-12, eng] 41-1469
- Amery Ice Shelf**
- Mapping Amery Ice Shelf. Partington, K.C., et al, [1987, p.183-188, eng] 41-4455
- Radar altimetry delineates ice shelf boundaries and elevations. Zwally, H.J., et al, [1987, p.229-235, eng] 41-4465
- Amundsen-Scott Station**
- Aerosol measurements at the South Pole. Bodhaine, B.A., et al, [1986, p.223-235, eng] 41-1753
- International antarctic glaciological program activities at South Pole Station and Vostok. Lorus, C., [1985, p.73-74, eng] 41-2633
- Aerosol transport processes in the Antarctic. Hogan, A.W., et al, [1985, p.205-206, eng] 41-3324
- Sulphuric acid in the antarctic ice sheet. Legrand, M., et al, [1987, p.671-676, eng] 41-4325
- Antarctic Peninsula**
- Ice air interaction theory for migration of marginal ice zone. Chu, P.C., [1986, p.863-883, eng] 41-869
- Development of the South Shetland Islands and the Antarctic Peninsula. Barsch, D., et al, [1986, p.211-218, eng] 41-1279
- Morphological and chemical data on microparticles in antarctic snows. Goldschmidt, A., [1986, p.99-103, eng] 41-2463
- Arthur Harbor**
- Ice diatom floras in Arthur Harbor. Krebs, W.N., et al, [1987, p.163-171, eng] 41-3427
- Asgard Range**
- Microbial environment in Ross desert from satellite nanoclimate data, 1984-1986. Friedmann, E.I., et al, [1987, p.273-287, eng] 41-4627
- Bach Ice Shelf**
- Imaging subglacial topography by a synthetic aperture radar technique. Musil, G.J., et al, [1987, p.170-175, eng] 41-4453
- Bransfield Strait**
- Travelling in antarctic weather. Junqueira Villela, R., [1986, p.42-55, por] 41-587
- Iceberg sightings during SIBEX-2, Chile, in Bransfield Strait, 1985. Schlatter, R.P., [1986, p.89-93, spa] 41-2812
- Contribution to the study of sediments in the Bransfield Strait region. Silva Martins, L.R., et al, [1987, p.127-146, por] 41-3156
- Helium-3 balance of the upper layers of the northwest Weddell Sea. Schlosser, P., et al, [1987, p.365-377, eng] 41-4602
- Brunt Ice Shelf**
- Brunt Ice Shelf flow, 1974-1985, from Landsat images. Simmons, D.A., [1986, p.252-254, eng] 41-486



- Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274
- Budd Coast**  
Ice core drill site at Law Dome summit. Hamley, T.C., et al, [1986, 34p., eng] 41-459  
Methanesulphonate in antarctic ice. Ivey, J.P., et al, [1986, p.375-379, eng] 41-2503
- Byrd Glacier**  
Surface velocity determination on large polar glaciers by aerial photogrammetry. Brecher, H.H., [1986, p.22-26, eng] 41-412  
Antarctica: measuring glacier velocity from satellite images. Lucchitta, B.K., et al, [1986, p.1105-1108, eng] 41-962  
Finite-element method applied to a time-dependent flowband model. Fastook, J.L., [1987, p.203-221, eng] 41-3282
- Byrd Station**  
Long-term record of H<sub>2</sub>O<sub>2</sub> in polar ice cores. Neftel, A., et al, [1986, p.262-270, eng] 41-1756  
Grain growth in polar ice: Pta. 1 and 2. Alley, R.B., et al, [1986, p.415-433, eng] 41-4297  
Isotopic fractionation at the base of polar and sub-polar glaciers. Boulton, G.S., et al, [1986, p.475-485, eng] 41-4303
- Casey Station**  
Casey snow runway data report, 1983-84. Russell-Head, D.S., et al, [1984, 98p., eng] 41-4526  
Casey snow runway tests, 1983-84. Russell-Head, D.S., et al, [1984, 111p., eng] 41-4527  
Casey snow runway meteorological records, 1984. Russell-Head, D.S., et al, [1987, 98p., eng] 41-4528
- Cray Ice Rise**  
Glaciogeophysical survey of the Ross Embayment, 1984-1985. Bentley, C.R., et al, [1985, p.63-64, eng] 41-2626
- Dakshin Gangotri Station**  
Site selection for structures on a floating ice shelf, Antarctica. Sharma, S.S., [1986, p.1093-1105, eng] 41-1147  
Structures on a floating ice shelf in Antarctica. Sharma, S.S., [1986, p.298-311, eng] 41-2280
- Davis Station**  
Seasonal variation of chlorophyll-*a* in fast ice near Davis Station. Lu, P., [1986, p.11-19, chj] 41-397  
Primary production of inshore water near Davis Station. Lu, P., et al, [1986, p.38-43, chj] 41-398  
Some ecological observations on antarctic ice algae. Zhang, K., et al, [1986, p.49-59, chj] 41-399  
Formation of the ice algae layer in antarctic sea ice. Zhang, K., et al, [1986, p.60-65, chj] 41-400  
Ice algae in sea ice near Davis Station, Antarctica. Yu, J., et al, [1986, p.66-71, chj] 41-401  
Dominant diatom in the sea ice near Davis Station. Zhang, K., et al, [1986, p.72-75, chj] 41-402  
Identification of phytoplankton pigments in waters near Davis Station. Li, B., et al, [1986, p.110-115, chj] 41-403  
Nanoplankton in the waters near Davis Station. Mao, X., et al, [1986, p.130-135, chj] 41-404  
Inshore seasonal changes in diatoms near Davis Station. Everitt, D.A., et al, [1986, p.3-12, eng] 41-1173  
Sea ice measurements at Davis Station. Zhang, Q., [1986, p.143-148, chj] 41-1461  
Seasonal variation in phytoplankton and ice algae in shallow coast site. Ferrin, R.A., et al, [1987, p.33-46, eng] 41-4084
- Dome C**  
Long-term climatic changes indicated by crystal growth in polar ice. Petit, J.R., et al, [1987, p.62-64, eng] 41-2750  
Two Be-10 peak depositions in ice during last glaciation. Raisbeck, G.M., et al, [1987, p.273-277, eng] 41-2891  
Grain growth in polar ice: Pta. 1 and 2. Alley, R.B., et al, [1986, p.415-433, eng] 41-4297
- Druzhnaya Station**  
Soviet research station disappears. Fresco-Mayoux, A., [1986, p.61-63, fre] 41-2018
- East Antarctica**  
Glacier thickness and velocity measurements. Sheremet'ev, A.N., [1986, p.127-132, rus] 41-1269  
Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core. De Angelis, M., et al, [1987, p.318-321, eng] 41-2505  
Geology and origin of the Elephant Moraine on the east antarctic ice sheet. Faure, G., et al, [1985, p.11-12, eng] 41-2623  
Climatic warming and basal melting of large ice sheets. Saari, M.R., et al, [1987, p.33-36, eng] 41-2947  
Seasonal variations of east antarctic sea ice. Jacka, T.H., et al, [1987, p.85-91, eng] 41-4441
- Ekström Ice Shelf**  
Tidal spectrum underneath antarctic ice shelves. Pedley, M., et al, [1986, p.13,001-13,009, eng] 41-1859  
45 m mast for boundary layer meteorological research, Ekström Ice Shelf. Belitz, H.-J., et al, [1987, p.5-10, eng] 41-2844
- Erebus Glacier Tongue**  
Simulation of Erebus Glacier Tongue thermal regime. Stolle, D.F.E., et al, [1986, p.530-534, eng] 41-4309
- Erebus, Mount**  
Japanese earth science research at McMurdo Sound, 1985-1986. Kaminuma, K., [1986, p.138-147, jpn] 41-981
- Ferraz Station**  
Travelling in antarctic weather. Junqueira Villela, R., [1986, p.42-55, por] 41-587  
Contribution to the study of sediments in the Bransfield Strait region. Silva Martins, L.R., et al, [1987, p.127-146, por] 41-3156
- Flüchner Ice Shelf**  
Soviet research station disappears. Fresco-Mayoux, A., [1986, p.61-63, fre] 41-2018  
Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274  
Coastline changes revealed by satellite imagery. Ferrigno, J.G., et al, [1987, p.577-583, eng] 41-3856
- Flüchner Station**  
Deformation of snow and ice at German antarctic stations. Dörr, R., [1984, 124p., ger] 41-1272
- Fimbul Ice Shelf**  
Radar altimetry delineates ice shelf boundaries and elevations. Zwally, H.J., et al, [1987, p.229-235, eng] 41-4463
- Framnes Mountains**  
Crystallography of Patterned Lake, Framnes Mountains. Chambers, J.L.C., et al, [1986, p.520-526, eng] 41-4307
- Georg von Neumayer Station**  
Deformation of snow and ice at German antarctic stations. Dörr, R., [1984, 124p., ger] 41-1272  
45 m mast for boundary layer meteorological research, Ekström Ice Shelf. Belitz, H.-J., et al, [1987, p.5-10, eng] 41-2844
- George VI Ice Shelf**  
Tidal spectrum underneath antarctic ice shelves. Pedley, M., et al, [1986, p.13,001-13,009, eng] 41-1859  
Seismic bedrock depth measurements and the origin of George VI Sound, Antarctic Peninsula. Maslanyj, M.P., [1987, p.51-65, eng] 41-3811
- Granite Harbor**  
Sea ice operation: McMurdo Sound-Granite Harbour. Pyne, A.R., [1986, p.5-13, eng] 41-2870
- Great Wall Station**  
Snow blizzard in summertime—random notes on observations in Antarctica. Jin, T., [1980, 216p., chj] 41-4125
- Hoare, Lake**  
Perennial N<sub>2</sub> supersaturation in an antarctic lake. Wharton, R.A., et al, [1987, p.343-345, eng] 41-2506  
Spectral downwelling irradiance in an antarctic lake. Palmisano, A.C., et al, [1987, p.145-151, eng] 41-3426
- Lambert Glacier**  
Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, [1986, p.1-12, eng] 41-1469
- Larsen Ice Shelf**  
Coastline changes revealed by satellite imagery. Ferrigno, J.G., et al, [1987, p.577-583, eng] 41-3856
- Less Passage**  
Unloading of a large tanker near Mirny Station. Kozlovskii, A.M., et al, [1986, p.116-119, rus] 41-1267
- Lützow-Holm Bay**  
Mechanical properties of antarctic sea ice (II). Urabe, N., et al, [1987, p.239-244, eng] 41-2427  
Decomposition of organic matter under fast ice at Lützow-Holm Bay. Matsuda, O., et al, [1986, p.55-66, eng] 41-3632  
Krill overwintering strategy under fast ice in Lützow-Holm Bay. Kawaguchi, K., et al, [1986, p.67-85, eng] 41-3633
- Marie Byrd Land**  
Surface features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al, [1986, p.168-170, eng] 41-411  
Reinterpretation of glaciovolcanic interactions in Marie Byrd Land. McIntosh, W.C., et al, [1985, p.57-59, eng] 41-2624
- Mawson Station**  
Climate at Mawson. Guo, S., et al, [1984, p.41-58, chj] 41-266
- McMurdo Sound**  
Sources of organic nitrogen, phosphorus and carbon in antarctic streams. Downes, M.T., et al, [1986, p.215-225, eng] 41-613  
Lipids of the antarctic sea ice diatom *Nitzschia cylindrus*. Nichols, P.D., et al, [1986, p.1649-1653, eng] 41-614  
Vehicular transport at McMurdo. Dibbern, J.S., [1986, 31p., eng] 41-638  
Japanese earth science research at McMurdo Sound, 1985-1986. Kaminuma, K., [1986, p.138-147, jpn] 41-981  
Benthic microalgal standing stock distribution patterns at McMurdo Sound. Dayton, P.K., et al, [1986, p.207-213, eng] 41-1015  
Ice pumps and their rates. Lewis, E.L., et al, [1986, p.11,756-11,762, eng] 41-1024  
Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al, [1984, p.159-165, eng] 41-1280
- In situ* measurements of the resistivity of antarctic sea ice. Buckley, R.G., et al, [1986, p.285-290, eng] 41-1295  
Icebreaking operations in McMurdo Sound, Antarctica. Wubbolt, J.H., [1986, p.523-530, eng] 41-2043  
Operation of light air cushion vehicle at McMurdo Sound. Dibbern, J.S., [1987, 139p., eng] 41-2257  
Photosynthesis and carbon metabolism of phytoplankton from McMurdo Sound, Pti. Rivkin, R.B., et al, [1987, p.249-259, eng] 41-2504  
Sea ice operation: McMurdo Sound-Granite Harbour. Pyne, A.R., [1986, p.5-13, eng] 41-2870  
Vertical sediment flux beneath annual sea ice, McMurdo Sound, Antarctica. Dunbar, R.B., et al, [1985, p.109-111, eng] 41-2950  
Ecology of sea ice microbial communities of McMurdo Sound. Kottmeier, S.T., et al, [1985, p.128-130, eng] 41-2956
- Photoadaptive strategies in a natural population of *Phaeocystis pouchetii* in McMurdo Sound. Palmisano, A.C., et al, [1985, p.133-134, eng] 41-2957  
Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses. Rivkin, R.B., et al, [1985, p.146-147, eng] 41-2960  
Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover. McGrath Grossi, S., et al, [1987, p.153-164, eng] 41-3131
- Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microalgal communities. Palmisano, A.C., et al, [1987, p.165-173, eng] 41-3132  
Bacterial production in annual sea ice in McMurdo Sound. Kottmeier, S.T., et al, [1987, p.175-186, eng] 41-3133  
Environmental and photosynthetic relationships in antarctic sea ice algae. Palmisano, A.C., et al, [1987, p.299-306, eng] 41-3146  
Scattering and absorption of visible light by sea ice. Buckley, R.G., et al, [1987, p.867-869, eng] 41-3639  
Moving loads on sea ice. Squire, V.A., et al, [1987, p.569-575, eng] 41-3133  
Chemical fractionation of brine in McMurdo Ice Shelf. Cragin, J.H., et al, [1986, p.307-313, eng] 41-4281
- McMurdo Station**  
Airborne observations of terrestrial surfaces. Egan, W.C., [1986, p.501-510, eng] 41-3988
- Mertz Bank**  
Glacial and iceberg effects on morphology off Wilkes Land. Barnes, P.W., [1987, p.175-194, eng] 41-4543
- Mirny Station**  
Unloading of a large tanker near Mirny Station. Kozlovskii, A.M., et al, [1986, p.116-119, rus] 41-1267  
Use of sea ice for cargo unloading. Nazintsev, I.U., et al, [1986, p.120-126, rus] 41-1268  
Preliminary results of microbiological investigations at Mirny. Abyzov, S.S., et al, [1986, p.133-136, rus] 41-1270  
Homogeneity of series of mean monthly wind speed data for Soviet antarctic stations. Kolosova, N.V., [1981, p.45-54, rus] 41-2012  
Surface wind velocity profiles in Antarctica. Kolosova, N.V., [1981, p.55-62, rus] 41-2013
- Mizuho Plateau**  
Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, [1986, p.1-12, eng] 41-1469
- Mizuho Station**  
Pb-210 measurement of snow accumulation at Mizuho Station. Masuda, N., et al, [1986, p.159-165, eng] 41-1472  
Glacio-geophysical implications of NNSS positioning at Showa Station. Shibuya, K., [1986, p.327-346, eng] 41-2212  
Ice crystal growth form and mechanism at low atmospheric saturation. Gonda, T., et al, [1986, p.30-37, eng] 41-3655  
Borehole closure at Mizuho Station. Kawada, K., et al, [1986, p.66-73, eng] 41-3659  
Textures and fabrics of 700-m deep ice core from Mizuho Station. Narita, H., et al, [1986, p.74-77, eng] 41-3660  
Volume expansion of a 413.5-m Mizuho core after its recovery. Nakawo, M., [1986, p.78-85, eng] 41-3661  
JARE-26 glaciological research, 1984-1986. Ageta, Y., et al, [1987, 71p., eng] 41-3668
- Molodetzhnaya Station**  
Homogeneity of series of mean monthly wind speed data for Soviet antarctic stations. Kolosova, N.V., [1981, p.45-54, rus] 41-2012
- Murphy, Mount**  
Reinterpretation of glaciovolcanic interactions in Marie Byrd Land. McIntosh, W.C., et al, [1985, p.57-59, eng] 41-2624
- Napier Mountains**  
Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, [1986, p.1-12, eng] 41-1469
- Norvegia, Cape**  
Late Pleistocene sedimentation processes on the antarctic continental shelf. Grobe, H., [1986, 121p. + figs., ger] 41-267

## Antarctica (cont.)

- Nye Mountains**  
Antarctic ice sheet configuration 30 deg E to 80 deg E.  
Shibuya, K., et al, 1986, p.1-12, eng 41-1469
- Oates coast**  
Winter climatic conditions in the Somov Sea. Petrov, L.S., et al, 1986, p.72-79, eng 41-3951
- Ongul Island**  
Seasonal environmental changes on mosses at Showa Station. Kanda, H., 1986, p.17-26, eng 41-1043
- Palmer Station**  
Antarctic docking facility study carried out by Han-Padron Associates. 1986, n.p., eng 41-214
- Pine Island Bay**  
Amundsen Sea sediment coring. Kellogg, T.B., et al, 1985, p.79-81, eng 41-2635
- Pine Island Glacier**  
Glacial erosion in western Antarctica. Glazovskii, A.F., 1986, p.135-139, rus 41-1655
- Prince Olav Coast**  
Flora and vegetation of mosses in ice-free areas of Soya Coast and Prince Olav Coast, East Antarctica. Kanda, H., 1981, p.91-100, eng 41-3567
- Queen Maud Land**  
Swedish and Nordic polar research. Karlqvist, A., 1986, p.105-112, eng 41-967  
Influence of atmospheric circulation on the formation of Weddell polynya. Lysakov, E.P., et al, 1986, p.52-56, rus 41-4187  
Ground and satellite measurement of ice sheets, Queen Maud Land. Fujii, Y., et al, 1987, p.72-75, eng 41-4438  
JARE reports bottom topography and ice cores, Queen Maud Land. Yoshida, M., et al, 1987, p.221-224, eng 41-4463
- Riiser-Larsen Ice Shelf**  
Flow and thickness of Riiser-Larsenisen, Antarctica. Orheim, O., et al, 1986, p.37-41, eng 41-4093  
Riiser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al, 1986, p.23-31, eng 41-4094  
Riiser-Larsen oxygen isotopes and accumulation rates. Orheim, O., et al, 1986, p.33-47, eng 41-4095
- Ronne Ice Shelf**  
Radio-echo investigations of Ronne Ice Shelf. Crabtree, R.D., et al, 1986, p.37-41, eng 41-735  
Ice rumples on Ronne Ice Shelf. Smith, A.M., 1986, p.47-52, eng 41-800  
Tidal spectrum underneath antarctic ice shelves. Pedley, M., et al, 1986, p.13,001-13,009, eng 41-1859  
Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., 1987, p.57-74, eng 41-3274  
Some aspects of the flow of the Ronne Ice Shelf. Doake, C.S.M., 1987, p.75-98, eng 41-3275  
Thickness of the Ronne Ice Shelf. Engelhardt, H., et al, 1987, p.318-319, eng 41-3640
- Ross Ice Shelf**  
Ross Ice Shelf oxygen isotopes and west antarctic climate history. Grootes, P.M., et al, 1986, p.49-67, eng 41-612  
Ice pumps and their rates. Lewis, E.L., et al, 1986, p.11,756-11,762, eng 41-1024  
Saturated porous layer beneath active ice stream. Blankenship, D.D., et al, 1986, p.54-57, eng 41-1779  
Tidal spectrum underneath antarctic ice shelves. Pedley, M., et al, 1986, p.13,001-13,009, eng 41-1859  
Nitrate flux on the Ross Ice Shelf and its relation to solar cosmic rays. Zeller, E.J., et al, 1986, p.1264-1267, eng 41-2019  
Nitrate variability in South Pole and Ross Ice Shelf snow and firm. Laird, C.M., et al, 1985, p.68-69, eng 41-2629  
Oceanic inclusions in the J-9 sea-ice core. Zotikov, I.A., et al, 1985, p.113-115, eng 41-2952  
Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., 1983, 274p., eng 41-3073  
Nitrate deposition in Antarctica; temporal and spatial variations. Laird, C.M., 1986, 268p., eng 41-3155  
Ice-shelf backpressure: form drag versus dynamic drag. MacAyeal, D.R., 1987, p.141-160, eng 41-3278  
Ice stream-ice shelf interaction in West Antarctica. Bindshadler, R.A., et al, 1987, p.161-180, eng 41-3279  
Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, 1987, p.181-184, eng 41-3280  
Finite-element method applied to a time-dependent flowband model. Fastook, J.L., 1987, p.203-221, eng 41-3282  
Heat budget of the Ross drainage basin. Oerlemans, J., 1987, p.287-292, eng 41-3285  
Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, 1987, p.293-320, eng 41-3286  
Modelling the response of the West Antarctic Ice Sheet to a climatic warming. Budd, W.F., et al, 1987, p.321-358, eng 41-3287  
Recent advance of the Ross Ice Shelf, Antarctica. Jacobs, S.S., et al, 1986, p.464-474, eng 41-4302  
Texture of polar firm for remote sensing. Alley, R.B., 1987, p.1-4, eng 41-4426
- Remote sensing in the Ross Ice Shelf region. Bentley, C.R., et al, 1987, p.20-29, eng 41-4429  
Microearthquakes on the eastern Ross Ice Shelf. Blankenship, D.D., et al, 1987, p.30-34, eng 41-4430  
Digital radar system for echo studies on ice sheets. Schultz, D.G., et al, 1987, p.206-210, eng 41-4459
- Ross Island**  
Japanese earth science research at McMurdo Sound, 1985-1986. Kaminuma, K., 1986, p.138-147, jpn 41-981
- Ross Sea**  
Biogenic silica accumulation in the Ross Sea. Ledford-Hoffman, P.A., et al, 1986, p.2099-2110, eng 41-458  
Seas of the World Ocean. Sukhovet, V.F., 1986, 288p., rus 41-556  
Ross Sea oceanography, 1985. Pillsbury, R.D., et al, 1985, p.112-113, eng 41-2951  
Airborne measurements of the antarctic cloud water acidity. Saxena, V.K., et al, 1985, p.201-203, eng 41-3323  
Winter climatic conditions in the Somov Sea. Petrov, L.S., et al, 1986, p.72-79, eng 41-3951
- Schirmacher Hills**  
Geocryology of the Schirmacher Hills. Vtiurin, B.I., 1986, p.200-212, eng 41-3200
- Shirase Glacier**  
Airborne radio echo-sounding in Shirase Glacier basin. Mac, S., et al, 1987, p.160-165, eng 41-4451
- Showa Station**  
Stratospheric aerosol layer in winter. Iwasaka, Y., 1986, p.143-151, eng 41-1019  
Seasonal environmental changes on mosses at Showa Station. Kanda, H., 1986, p.17-26, eng 41-1043  
Balloon observation of aerosols in the antarctic troposphere and stratosphere. Ito, T., et al, 1986, p.214-222, eng 41-1752  
Glacio-geophysical implications of NNSS positioning at Showa Station. Shibuya, K., 1986, p.327-346, eng 41-2212  
Flora and vegetation of mosses in ice-free areas of Soya Coast and Prince Olav Coast, East Antarctica. Kanda, H., 1981, p.91-100, eng 41-3567  
Microbiology of human pollution at Showa Station. Toyoda, S., et al, 1985, p.541-546, jpn 41-3568  
Ice-algae photosynthesis under fast ice at Showa Station. Satoh, H., et al, 1986, p.34-42, eng 41-3631  
Sea ice meiofauna at Showa Station. Hoshiai, T., et al, 1986, p.118-124, eng 41-3634  
Snow algal bloom and habitat at Showa Station. Ishikawa, S., et al, 1986, p.191-197, eng 41-3635  
Soil nutrient and algal distribution near Showa Station. Akiyama, M., et al, 1986, p.198-201, eng 41-3636  
Stratospheric aerosol descent in winter and effects on water vapor budget. Iwasaka, Y., 1986, p.13-18, eng 41-3654  
Morphology of bullet-type snow crystals at Showa Station. Iwai, K., 1986, p.38-46, eng 41-3656  
Trace elements in surface snow near Showa Station. Nishikawa, M., et al, 1986, p.47-55, eng 41-3657  
JARE-25 oceanographic and marine biological data, Feb. 1984-Jan. 1985. Matsuda, O., et al, 1987, 21p., eng 41-3667
- Signy Island**  
Nitrogen in two contrasting antarctic bryophyte communities. Christie, P., 1987, p.73-93, eng 41-3795
- Siple Coast**  
Firm studies at upstream B, Siple Coast. Alley, R.B., et al, 1985, p.65-66, eng 41-2627  
Measurement of firm structure. Alley, R.B., 1986, p.391-396, eng 41-4294
- Siple Station**  
Ice core record of the C-13/C-12 ratio of atmospheric CO<sub>2</sub> in the past two centuries. Friedli, H., et al, 1986, p.237-238, eng 41-1631  
Siple ice core data reveals biospheric CO<sub>2</sub> emissions. Siegenthaler, U., et al, 1987, p.140-154, eng 41-3196
- Sør Rondane Mountains**  
JARE-27 field report, Sør Rondane Mountains, 1986. Moriaki, K., et al, 1986, p.246-281, jpn 41-2695
- South Pole**  
Nitrate variability in South Pole and Ross Ice Shelf snow and firm. Laird, C.M., et al, 1985, p.68-69, eng 41-2629  
Nitrate deposition in Antarctica; temporal and spatial variations. Laird, C.M., 1986, 268p., eng 41-3155  
Chemical tests of antarctic hygroscopic aerosols. Ohtake, T., 1985, p.208-210, eng 41-3325
- South Shetland Islands**  
Travelling in antarctic weather. Junqueira Villela, R., 1986, p.42-55, por 41-587  
Development of the South Shetland Islands and the Antarctic Peninsula. Barsch, D., et al, 1986, p.211-218, eng 41-1279
- Takake, Mount**  
Reinterpretation of glaciovolcanic interactions in Marie Byrd Land. McIntosh, W.C., et al, 1985, p.57-59, eng 41-2624
- Taylor Valley**  
Radiocarbon chronology of the last glaciation in McMurdo Sound. Denton, G.H., et al, 1985, p.59-61, eng 41-2625
- Terra Nova Bay**  
Boundary layer studies at Terra Nova Bay. Bromwich, D.H., 1986, p.13-16, eng 41-1073  
Modern sediments of the Terra Nova Bay polynya. Hughes, P., et al, 1985, p.107-108, eng 41-2949
- Thwaites Glacier**  
Coastline changes revealed by satellite imagery. Ferrigno, J.G., et al, 1987, p.577-583, eng 41-3856
- Victoria Land**  
Stable isotope stratigraphy of ice cores and the age of the last eruption at Mount Melbourne, Antarctica. Lyon, G.L., 1986, p.135-138, eng 41-610  
Antarctic stream ecosystems: variability in environmental properties and algal community structure. Howard-Williams, C., et al, 1986, p.511-544, eng 41-1558  
Perennial N<sub>2</sub> supersaturation in an antarctic lake. Wharton, R.A., et al, 1987, p.343-345, eng 41-2506  
Eolian dunes in Victoria Land. Miotke, F.-D., 1985, p.79-125, ger 41-3252  
Method for the continuous monitoring of snow: application to the cryptoendolithic microbial community of Antarctica. Friedmann, E.I., et al, 1985, p.179-181, eng 41-3322
- Vostok Station**  
Pseudomonas genus of bacteria isolated from Antarctic ice sheets. Sorokina, T.A., et al, 1986, p.494-504, rus 41-1824  
Homogeneity of series of mean monthly wind speed data for Soviet antarctic stations. Kolosova, N.V., 1981, p.45-54, rus 41-2012  
Surface wind velocity profiles in Antarctica. Kolosova, N.V., 1981, p.55-62, rus 41-2013  
Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core. De Angelis, M., et al, 1987, p.318-321, eng 41-2505  
International antarctic glaciological program activities at South Pole Station and Vostok. Lorus, C., 1985, p.73-74, eng 41-2633  
Long-term climatic changes indicated by crystal growth in polar ice. Petit, J.R., et al, 1987, p.62-64, eng 41-2750  
Two Be-10 peak depositions in ice during last glaciation. Raisbeck, G.M., et al, 1987, p.273-277, eng 41-2891  
Sulphuric acid in the antarctic ice sheet. Legrand, M., et al, 1987, p.671-676, eng 41-4325  
Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP. Boutron, C.F., et al, 1987, p.1197-1202, eng 41-4603
- Weddell Sea**  
Weddell-Scotia Sea MIZ, October 1984. Crasey, F.D., et al, 1986, p.3920-3924, eng 41-93  
Seas of the World Ocean. Sukhovet, V.F., 1986, 288p., rus 41-556  
Organism losses during sea ice melting. Garrison, D.L., et al, 1986, p.237-239, eng 41-1016  
High latitude drilling in the ocean drilling program. Harding, B.W., et al, 1986, p.83-106, eng 41-1092  
Morphology and sediment processes and supply from Weddell Sea floor. Anderson, J.B., et al, 1986, p.121-129, eng 41-1279  
Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al, 1986, p.3920-3924, eng 41-1361  
Biogenic and mineral inclusions in a green iceberg from the Weddell Sea. Dieckmann, G., et al, 1987, p.31-33, eng 41-1975  
Ice dynamics in the Weddell Sea, 1980. Golosov, V.V., 1986, p.103-108, rus 41-2722  
Salinity, alkalinity, and calcium of the Weddell Sea ice. Chen, C.-T.A., 1985, p.117-119, eng 41-2953  
Microheterotrophs in the ice-edge zone: an AMERIEZ study. Garrison, D.L., et al, 1985, p.136-137, eng 41-2958  
Ice dynamics. Hibler, W.D., III, 1986, p.577-640, eng 41-2995  
Circulation and mixing in ice-covered waters. Carmack, E.C., 1986, p.641-712, eng 41-2996  
Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., 1987, p.57-74, eng 41-3274  
Water masses and currents of the southern ocean. Whitworth, T., III, et al, 1987, p.6462-6476, eng 41-3641  
Role of standing waves in dynamics of Weddell Sea ice sheet. Seidov, D.G., et al, 1986, p.90-93, eng 41-3681  
Morphological variation in antarctic diatom, genetic analysis. Wood, A.M., et al, 1987, p.42-54, eng 41-3997  
Polynuclear hydrocarbon concentrations from oil spilled in seawater. Ventajas, L., 1986, 15p., spa 41-3999  
Soviet-American field experiment "Weddell-POLEX-81". Sarukhanian, E.I., 1986, p.9-18, rus 41-4182  
Thermohaline water stratification in the southern ocean from ice cover data. Bagriantsev, N.V., et al, 1986, p.18-27, rus 41-4183  
Soviet-American expedition "Weddell-POLEX-81", review. Gordon, A.L., 1986, p.27-37, rus 41-4184

- Meso- and macroscale air-sea interaction processes in the South Atlantic Ocean. Vasil'ev, V.F., et al, 1986, p.62-67, rus **41-4188**
- Small-scale interaction between atmosphere and ocean at Maud Rise. Makshtas, A.P., et al, 1986, p.67-71, rus **41-4189**
- Shuttle Imaging Radar B Weddell Sea ice observations. Martin, S., et al, 1987, p.7173-7179, eng **41-4269**
- Density nutrients and phytoplankton in the ice edge zone of the Weddell-Scotia Sea. Nelson, D.M., et al, 1987, p.7181-7190, eng **41-4270**
- Evolution of under-water sides of ice shelves and icebergs. Orheim, O., 1987, p.176-182, eng **41-4454**
- Helium-3 balance of the upper layers of the northwest Weddell Sea. Schlosser, P., et al, 1987, p.365-377, eng **41-4602**
- Archaeomonad (Chrysophyta) cysts: ecological and paleoecological significance. Mitchell, J.G., et al, 1986, p.289-298, eng **41-4609**
- West Antarctica**
- West Antarctic ice sheet dynamics. Van der Veen, C.J., 1985, p.732-734, eng **41-983**
- Deformation of till beneath ice stream B, West Antarctica. Alley, R.B., et al, 1986, p.57-59, eng **41-1780**
- Force budget of ice sheets. Whillans, I.M., 1987, p.17-36, eng **41-2462**
- Dynamics of the West Antarctic Ice Sheet. Van der Veen, C.J., ed, 1987, 368p, eng **41-3271**
- West Antarctic Ice Sheet: the need to understand its dynamics. Van der Veen, C.J., 1987, p.1-16, eng **41-3272**
- Ice stream-ice shelf interaction in West Antarctica. Bindshadler, R.A., et al, 1987, p.161-180, eng **41-3279**
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al, 1987, p.249-285, eng **41-3284**
- Ice streams draining into the Ross Ice Shelf. Shabtaie, S., et al, 1987, p.1311-1336, eng **41-3764**
- Wilkes Land**
- Lead concentration changes in antarctic ice during the Wisconsin/Holocene transition. Boutron, C.F., et al, 1986, p.222-225, eng **41-1630**
- Microparticles in Dome C ice cores. Gaudichet, A., et al, 1986, p.250-261, eng **41-1755**
- Wilkes Land Expedition 1985: biological observations in the ice-edge zone. Garrison, D.L., et al, 1985, p.123-124, eng **41-2954**
- Glacial and iceberg effects on morphology off Wilkes Land. Barnes, P.W., 1987, p.175-194, eng **41-4545**
- Wright Valley**
- Method for the continuous monitoring of snow: application to the cryoendolithic microbial community of Antarctica. Friedmann, E.I., et al, 1985, p.179-181, eng **41-3322**
- Antennas**
- Antenna towers and antenna-supporting structures. 1981, 65p, eng **41-493**
- Antenna ice removal and prevention apparatus. Walton, W.B., Jr., 1983, 4 col., eng **41-1979**
- Antenna deicing apparatus. Levin, H.L., 1981, 6 col. + 3 sheets, eng **41-2369**
- Atmospheric icing on communication masts in New England. Mulherin, N.D., 1986, 46p, eng **41-3142**
- Rime meteorology in the Green Mountains. Ryerson, C.C., 1987, 46p, eng **41-3144**
- Technical support for the CONUS OTH-B Experimental Radar System. Washburn, T.M., et al, 1980, 30p., eng **41-4326**
- Study of sea-spray icing of communications antennas—exploratory (NSAF project Q-5-79). 1981, 43p. + append., eng **41-4636**
- Antifreezes**
- Reducing the amount of cement and fuel used in the production of prefabricated reinforced concrete. Dvorkin, L.I., 1985, 99p. (Pertinent p.50-69), rus **41-650**
- Concrete admixtures handbook: properties, science, and technology. Ramachandran, V.S., ed, 1984, 626p., eng **41-1030**
- Antifreezing admixtures. Ratnov, V.B., et al, 1984, p.430-479, eng **41-1032**
- Sodium nitrite water solutions used in the construction of roadbeds for forest roads. Miglachenko, V.P., 1986, p.100-103, rus **41-1397**
- Automatic anti-freeze system for solar water heaters. Bonnet, A., 1983, 10 col., eng **41-1980**
- Monitoring a sump containing drilling mud with a high salt content. Nenninger, R.D., 1987, 47p., eng **41-3076**
- Antifreeze glycoproteins from polar fish blood. Feeney, R.E., et al, 1986, p.59-78, eng **41-3165**
- Ground aircraft deicing technology review. Mayer, D., et al, 1986, var.p., eng **41-3378**
- Water activity and freezing point depression of food systems. Chen, C.S., 1987, p.433-435, eng **41-3574**
- Ice growth in supercooled solutions of antifreeze glycoprotein. Harrison, K., et al, 1987, p.241-243, eng **41-4228**
- Anticlimbing additives**
- See: Chemical ice prevention
- Arctic landscapes**
- Atlas of the Arctic. Treshnikov, A.F., ed, 1985, 204p., rus **41-701**
- Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae—Leguminosae. Part 2. Family Leguminosae. Korobkov, A.A., et al, 1986, 188p., rus **41-2361**
- Adaptation of boreal plants to Arctic conditions. Borisovskaya, G.M., et al, 1986, p.15-22, rus **41-2599**
- Glaciation and the evolution of the Canadian high arctic landscape. England, J., 1987, p.419-424, eng **41-3319**
- Scientific challenges at the poles. Welch, J.P., et al, 1987, p.23-26, eng **41-3408**
- All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports. Sokolov, V.E., ed, 1986, 154p., rus **41-3539**
- Peculiarities of microbe associations in the Far North and Pamir highlands. Bab'eva, I.P., et al, 1986, p.12-13, rus **41-3540**
- Microbe associations of Arctic soils. Parinkina, O.M., 1986, p.101-103, rus **41-3542**
- See also: Polar regions
- Arctic Ocean**
- Influence of atmospheric circulation on sea ice conditions. Aleksandrov, E.I., et al, 1986, p.118-122, rus **41-118**
- Northern Hemisphere sea ice variability: observed and simulated. Walsh, J.E., 1986, p.3-20, eng **41-143**
- Ice navigation studies in the Alaskan Arctic using POLAR class icebreakers. Brigham, L.W., et al, 1985, p.441-447, eng **41-225**
- Evolution and potential of the Arctic submarine. McLaren, A.S., 1985, p.448-453, eng **41-226**
- Biological accumulation and monitoring of chemical wastes in arctic waters. Perkins, E.J., 1986, p.1-11, eng **41-340**
- Petroleum residues in the Canadian Arctic marine environment. Levy, E.M., 1986, p.161-169, eng **41-352**
- Arctic runs of the Balts. Kotliarskii, M., 1986, p.12-13, rus **41-435**
- Compendium of Arctic environmental information. Welsh, J.P., et al, 1986, 142p., eng **41-483**
- Forecasts and the efficiency of fleet performance. Collection of scientific papers. Shchelkanov, A.G., ed, 1985, 105p., rus **41-487**
- Determining the economic effectiveness of investments in the Arctic Fleet. Doban, V.A., 1985, p.6-10, rus **41-488**
- Computerized simulation of fleet performance in the Arctic. Baskikh, I.U.M., et al, 1985, p.48-53, rus **41-489**
- Using barge-carrier systems in Arctic transportation. Pavskii, E.I., 1985, p.62-67, rus **41-492**
- Age of the Arctic. Young, O.R., 1985, p.160-179, eng **41-526**
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, 1984, 280p., rus **41-571**
- Drilling mud usage and discharge in the Arctic Ocean, 1978-1982. Evance, T.B., comp, 1985, 6p. + append., eng **41-596**
- Use and disposal of drilling fluids in the Arctic Ocean, 1983. Milburn, D., et al, 1986, 38p., eng **41-597**
- Use and disposal of drilling fluids in the Arctic Ocean, 1984. Milburn, D., et al, 1986, 47p., eng **41-598**
- All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings. 1986, 236p., rus **41-702**
- Atmosphere and snow cover effects on emissive properties of ice. Pichugin, A.P., et al, 1986, p.119-123, rus **41-703**
- Geophysical exploration methods in the Arctic. Gaponenko, G.I., ed, 1978, 165p., rus **41-998**
- Allowing for variations in electromagnetic surveys of the Arctic Basin. Karasik, A.M., et al, 1978, p.83-92, rus **41-999**
- Use of spectral-correlation analysis in preliminary stages of investigations. Petrova, A.A., 1978, p.93-98, rus **41-1000**
- Aeromagnetic surveys in Arctic shelf seas. Palamarchuk, V.K., et al, 1978, p.129-133, rus **41-1001**
- Physical oceanography near the North Pole. Pounder, E.R., 1986, p.11, 763-11, 773, eng **41-1025**
- Regularities governing glacier fluctuations in the Eurasian Arctic. Kislov, A.V., et al, 1986, p.120-125, 236-241, eng **41-1066**
- Snow melt and surface albedo in the Arctic Basin. Robinson, D.A., et al, 1986, p.945-948, eng **41-1215**
- Geography of marine navigation. Nadochil, C.L., 1985, 263p., rus **41-1353**
- Valmet Co. and the technology of Arctic shelf development. 1985, p.104-105, rus **41-1522**
- Studying anomalously high ice drift velocities in Arctic seas. Kuznetsov, I.M., et al, 1986, p.57-60, eng **41-1691**
- Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., 1986, 224p., rus **41-1748**
- Conditions of upbuilding and properties of artificial sea-water ice. Gagarin, V.E., et al, 1986, p.140-146, rus **41-2167**
- Marine ice foundations for drilling rigs fixed at the bottom. Bogorodskii, V.V., et al, 1986, p.162-166, rus **41-2171**
- Users manual for a polar ice forecast subsystem—Arctic. Harr, P.A., 1981, 18p., eng **41-2328**
- Geomorphology of river deltas on the Arctic coast of Siberia. Korotaev, V.N., 1986, p.139-147, eng **41-2340**
- Ecologic problems of protecting living organisms in northern seas. Matishov, G.G., et al, 1986, p.13-16, rus **41-2387**
- Basic methods and principal results of studying the role of physical, chemical and biologic factors in the cleaning of Arctic waters and ice from petroleum hydrocarbons. Il'inskii, V.V., et al, 1986, p.171-173, rus **41-2390**
- Arctic sea ice extent and drift, modeled as a viscous fluid. Ling, C.-H., et al, 1986, p.71-98, eng **41-2577**
- Circum-Arctic petroleum potential. Green, A.R., et al, 1986, p.101-130, eng **41-2606**
- Sea water density and submarine operation in the Arctic. Frost, M.E., 1986, p.1-30, eng **41-2653**
- Forecasting ice thickness and concentration in the Arctic. Preller, R.H., et al, 1986, p.155-164, eng **41-2657**
- Ice cover thickness measurements in the Arctic Ocean. McLaren, A.S., et al, 1986, p.225-235, eng **41-2661**
- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, 1986, 160p., rus **41-2714**
- Scientific problems and basic results of the "Kosmos-1500" experiment. Afanas'ev, I.U.A., et al, 1986, p.4-20, rus **41-2715**
- Jurisdiction and management of Arctic marine transportation. Westermeyer, W.E., et al, 1986, p.338-349, eng **41-2725**
- Shipping in the Arctic, autumn 1983. 1984, p.32-35, eng **41-2937**
- Circulation and mixing in ice-covered waters. Carmack, E.C., 1986, p.641-712, eng **41-2996**
- First time above the North Pole. Stromilov, N.N., 1986, 134p., rus **41-3014**
- Sea ice thickness distribution in the Arctic Ocean. Bourke, R.H., et al, 1987, p.259-280, eng **41-3037**
- Comparison of boundary layer model with turbulent boundary layer. Myrhaug, D., 1987, p.135-148, eng **41-3135**
- Reinforced concrete for petroleum industry structures of the Arctic Shelf. Abadzhian, K.A., 1985, p.32-33, rus **41-3205**
- Marine processes. Baker, J.M., et al, 1987, p.50-74, eng **41-3233**
- Results of modeling high latitude climates. Nagurnyi, A.P., 1986, p.21-32, eng **41-3263**
- Characterization of Arctic undersea noise. Veitch, J.G., et al, 1983, 28p. + figs., eng **41-3382**
- NOAA Information Services for U.S. Arctic Marine Operations. 1986, 77p., eng **41-3508**
- Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., 1986, p.62-63, rus **41-3541**
- Tidal power plants. Bernshteyn, L.B., et al, 1987, 296p. (Pertinent p.239-273), rus **41-3675**
- Conference of geologists from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. 1986, 166p., rus **41-4060**
- Geographic studies of coastal zones of Arctic seas. Novikov, V.N., et al, 1986, p.5-7, rus **41-4061**
- Man, sea, technology. Narusbaev, A.A., ed, 1987, 335p., rus **41-4145**
- Oceanic thermal power plants. Il'in, A.K., 1987, p.96-112, rus **41-4146**
- Ships used in the exploitation of offshore deposits. Gorshel'nik, K., et al, 1987, p.221-231, rus **41-4147**
- Process of natural cleaning of the Arctic Basin surface (theoretical and experimental studies). Izmailov, V.V., 1986, p.51-58, rus **41-4196**
- Comparison of observed and modeled ice motion in the Arctic Ocean. Zwally, H.J., et al, 1987, p.136-144, eng **41-4448**
- Mass balance of the Arctic Ocean. Rudels, B., 1987, 53p., eng **41-4599**
- Methodical and experimental bases of geothermy. Kropotkin, P.N., ed, 1983, 230p. (Pertinent p.79-84, 181-187), rus **41-4614**
- Estimating the effect of atmospheric precipitation on sea-ice radar images. Aleksandrov, V.I.U., 1987, p.37-43, rus **41-4619**
- Argentina**
- Andes**
- Glacier mass balances in the Cajon del Rubio, Andes Centrales Argentinas. Leiva, J.C., et al, 1986, p.83-90, eng **41-1307**
- Geocryogenic regions of the Andes in Argentina. Corte, A.E., 1986, p.31-34, eng **41-3579**
- Nevado del Plomo**
- 1985 surge and ice dam of Glaciar Grande del Nevado del Plomo, Argentina. Bruce, R.H., et al, 1987, p.131-132, eng **41-3607**

**Argentina (cont.)****Rio del Plomo**

- Glacier dam on the Rio Plomo: a cyclic phenomenon. Del Rosario Prieto, M., [1986, p.73-78, eng] 41-3527
- Fluctuations of the Rio del Plomo glaciers. Espizda, L.E., [1986, p.317-327, eng] 41-3563

**Artificial freezing**

- Completion of the Voerde freeze shaft. Bittner, F., [1985, p.1423-1428, eng] 41-855
- Causes of fractured freeze pipes in the Hünxe shaft and their restoration. Wollers, K., [1985, p.1428-1433, eng] 41-856
- Shaft sinking in water-bearing noncompetent strata in China. Ma, Y., et al., [1985, p.1434-1437, eng] 41-857
- Influence of freezing on strata behavior. Stoss, K., et al., [1985, p.1438-1444, eng] 41-858
- Underpinnings with ground freezing. Gudehus, G., et al., [1985, p.203-211, ger] 41-1562
- Current ice road and structure design and construction procedures. Masterson, D.M., et al., [1986, p.602-648, eng] 41-2048
- Sea-water freezing equipment and technique for producing artificial ice. Gagarin, V.E., et al., [1986, p.172-176, rus] 41-2173
- Experiments with desalting brines. Sosnovskii, A.V., et al., [1986, p.208-214, rus] 41-2180
- Classification and laboratory testing of artificially frozen ground. Sayles, F.H., et al., [1987, p.22-48, eng] 41-2766

- Ground freezing techniques. Harris, J., [1986, p.11-12, 51, eng] 41-2893

- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968

- Different domains of application of cold. Manual. Bykov, A.V., ed., [1985, 271p. (Pertinent p.: 42-66, 99-125, 222-260), rus] 41-3154

- Permafrost control beneath gas pipelines. Nikonenko, I.S., et al., [1986, p.14-16, rus] 41-3206

- Dynamics of ice-rock barriers under conditions of freezing of filtering rocks. Chugunov, V.A., et al., [1987, p.981-986, eng] 41-3242

- Artificial freezing of cohesive soils for preventing adhesion. Mochalov, V.I., et al., [1986, p.15-17, rus] 41-3768

- Determining the state of stress in shaft-bearing during thawing. Abashin, S.I., et al., [1986, p.28-29, rus] 41-3769

- Calculating frost penetration into rocks of a cylindrical cavity. Dugartayrenov, A.V., et al., [1986, p.21-24, rus] 41-3770

- Heat and mass transfer in soil subjected to artificial freezing. Konoby, M.J., [1987, 209p., eng] 41-3842

- Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed., [1983, 123p., rus] 41-4470

- Seasonally active ground cooling devices used in hydraulic construction. Buchko, N.A., [1983, p.29-40, rus] 41-4473

- Using artificial cooling devices in permafrost areas. Gapeev, S.I., [1983, p.41-58, rus] 41-4474

- Regularities governing the development of forms of artificially frozen zones obtained by seasonally active freezing devices. Koval'kov, V.P., [1983, p.58-71, rus] 41-4475

- Air-circulation cooling devices. Konovalov, A.A., [1983, p.71-77, rus] 41-4476

- Ice-pillar roof supports in northern mines. Stoliarov, A.M., et al., [1986, p.38-47, rus] 41-4554

**Artificial ice**

- Strength of the natural and artificial river-water ice. Deriugin, A.G., et al., [1986, p.219-222, rus] 41-138

- Optimization of layer-by-layer artificial build-up of ice. Latalin, D.A., [1986, p.222-225, rus] 41-139

- Wind effect on artificial ice formation in sprinkler cones. Sosnovskii, A.V., [1986, p.225-230, rus] 41-140

- Book review. G.I. Smorygin. Theoretical basis for obtaining loose-structure ice. Sosnovskii, A.V., [1986, p.231-234, rus] 41-141

- Elasticity and viscosity of floating, model ice-cover. Iakunin, A.E., [1986, p.124-128, rus] 41-455

- Carbonated ice process and product. Hinman, D.C., et al., [1983, 10 col., eng] 41-1768

- Process for preparing gasified ice of improved stability. Kleiner, F., et al., [1983, 10 col., eng] 41-1770

- Problems of engineering glaciology. Alekseev, V.R., ed., [1986, 223p., rus] 41-2145

- Convective heat- and mass transfer between artificial ice and the atmosphere. Likhenshtein, E.L., [1986, p.10-16, rus] 41-2147

- Methods and equipment for obtaining artificial snow (granulated ice). Smorygin, G.I., et al., [1986, p.43-59, rus] 41-2153

- Theory and practice of the spray-cone ice formation technique. Khodakov, V.G., et al., [1986, p.60-66, rus] 41-2154

- Scientific basis for the processes of upbuilding frozen water-ice foams on ground and their practical application. Levinskii, B.V., et al., [1986, p.66-72, rus] 41-2155

- Evaluating production efficiency of pneumohydraulic sprayers of snow-producing equipment. Ivanov, I.I., [1986, p.72-77, rus] 41-2156

- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., [1986, p.92-94, rus] 41-2161

- Metamorphism and thermophysical properties of friable ice. Smorygin, G.I., [1986, p.106-121, rus] 41-2163

- Strength of granular ice. Deriugin, A.G., et al., [1986, p.129-134, rus] 41-2165

- Strength of reinforced-ice materials. Deriugin, A.G., et al., [1986, p.135-139, rus] 41-2166

- Conditions of upbuilding and properties of artificial sea-water ice. Gagarin, V.E., et al., [1986, p.140-146, rus] 41-2167

- Sea-water freezing equipment and technique for producing artificial ice. Gagarin, V.E., et al., [1986, p.172-176, rus] 41-2173

- Structure and mechanical properties of artificial ice. Save'ev, B.A., et al., [1986, p.169-176, rus] 41-2837

- Different domains of application of cold. Manual. Bykov, A.V., ed., [1985, 271p. (Pertinent p.: 42-66, 99-125, 222-260), rus] 41-3154

- Recommendations for the design and construction of geocryogenic coolers. Kuz'min, G.P., et al., [1986, 66p., rus] 41-3329

- Wind tunnel investigation of the riming of model ice crystal aggregates. Rasmussen, R.M., et al., [1984, p.151-155, eng] 41-4380

**Artificial islands**

- Artificial islands. [1986, p.47, 50, eng] 41-241

- Alaska's mineral industry, 1985. Bundtzen, T.K., et al., [1986, 68p., eng] 41-569

- Spray-ice islands evaluated for Arctic-drilling structures. Juvkam-Wold, H.C., [1986, p.57-66, eng] 41-646

- Ice effects on arctic offshore structures. Bruce, J.C., et al., [1983, p.14-15, eng] 41-788

- Artificial islands for arctic offshore exploration. Gerwick, B.C., Jr., [1984, p.467-476, eng] 41-894

- Interaction between submerged embankment and multi-year ice floes. Larsen, O.D., [1986, p.678-692, eng] 41-1124

- Arctic class hopper dredges. Brakel, J., et al., [1986, p.988-1000, eng] 41-1142

- Ice stress measurements in a rubble field surrounding a caisson-retained island. Sayed, M., et al., [1986, p.255-262, eng] 41-1597

- Ice island construction. Cox, G.F.N., et al., [1983, 8 col., eng] 41-1777

- Artificial islands: a distinct alternative. Zadikoff, G., [1985, p.1056-1061, eng] 41-1915

- Caisson retained island drilling platform. Beaufort Sea. De Jong, J.J.A., et al., [1978, p.2111-2120, eng] 41-2126

- Properties of salt water ice as material for artificial islands construction. Mirtzoev, D.A., et al., [1986, p.187-194, eng] 41-2274

- Endicott slope protection design and construction. Munday, J.P., et al., [1987, p.47-54, eng] 41-2401

- Norman Wells Expansion Project—overview. Tibbatts, R.M., [1986, p.51-59, eng] 41-2514

- Temperature regime of artificial ice-bearing earth structures. Save'ev, B.A., et al., [1986, p.166-168, rus] 41-2836

- Construction of deep foundations. Glotov, N.M., et al., [1985, 248p., rus] 41-3125

- Ice coring and testing. Issungnak 1980—results of NRC's data collection. Frederking, R., [1981, 5p. + figs., eng] 41-3554

- Engineering for man-made islands. [1986, p.155-158, eng] 41-4486

**Artificial melting**

- Passing spring meltwater when pipes are clogged by naleds. Dement'ev, V.A., [1986, p.16-17, rus] 41-511

- Method of preparing snow and ice control compositions. Stockel, R.F., [1983, 6 col., eng] 41-1776

- How to moor in ice. Braginets, O., [1986, p.60-61, rus] 41-1792

- Technical schemes for melting natural ice for water-supply systems. Vdovin, I.U.I., [1986, p.189-193, rus] 41-2176

- Calculating harmonic component levels when heating iced power lines. Zhezhelenko, I.V., et al., [1986, p.16-21, rus] 41-2546

See also: Artificial thawing

**Artificial nucleation**

- Use of ground smoke-generators in mountains. Laktionov, A.G., [1982, p.68-73, eng] 41-1007

- Cloud physics and modification. Zabolotskaia, T.N., ed., [1986, 113p., rus] 41-1447

- Studies of ice-forming properties of phloroglucinol under field conditions. Gromova, T.N., et al., [1986, p.116-123, rus] 41-3465

**Artificial precipitation**

- Cloud physics and modification. Zabolotskaia, T.N., ed., [1986, 113p., rus] 41-1447

- Additional precipitation by seeding stratiform clouds. Khusid, S.V., [1986, p.27-31, rus] 41-1448

- Numerical simulation of the artificial precipitation zone induced by seeding stratiform clouds with nucleating agents. Khvorost'ianov, V.I., et al., [1986, p.63-76, rus] 41-1902

- Doppler radar study of interaction between snowfall and cooling tower plume. Campiatron, B., [1987, p.1375-1383, eng] 41-4541

See also: Cloud seeding; Weather modification

**Artificial satellites**

See: Spacecraft

**Artificial snow**

- From snowflakes to ice grains. Microphysical aspects of snow making. Admirat, P., [1985, p.33-44, fre] 41-862

- CO<sub>2</sub> snow-making process. Crowe, O.F., et al., [1983, 10 col., eng] 41-1769

- CO<sub>2</sub> snow forming copper line. Franklin, P.R., Jr., [1983, 4 col., eng] 41-1775

- Methods and equipment for obtaining artificial snow (granulated ice). Smorygin, G.I., et al., [1986, p.43-59, rus] 41-2153

- Testing the experimental assembly for manufacturing artificial snow on dredge proving-grounds. Petrenko, N.R., [1986, p.78-80, rus] 41-2157

- Methods of making artificial snow and its physical properties. Mekhov, K.S., [1986, p.84-87, rus] 41-2159

- Using snow for dust control in northern mines. Osodoev, M.T., et al., [1986, p.193-196, rus] 41-2177

- Using artificial snow for dust control during mass-detonations in mines. Bitkolov, N.Z., et al., [1986, p.197-200, rus] 41-2178

- Snow-gun season. Marocchi, A., [1987, p.39-41, ita] 41-3309

- Experimental study on the initiation of blowing snow. Kobayashi, S., et al., [1985, p.195-200, jpn] 41-4588

See also: Snow manufacturing

**Artificial thawing**

- Sodium nitrite water solutions used in the construction of roadbeds for forest roads. Miglichenko, V.P., [1986, p.100-103, rus] 41-1397

- Thermal melioration of ground by late-fall loosening. Stafeev, P.F., [1986, p.4-5, rus] 41-1886

- Hydraulic power construction in the North. Kuperman, V.L., et al., [1987, 304p., rus] 41-3013

- Physico-chemical processes of thawing. Mathematical models of leaching ores and mining frozen rocks. Ignatov, A.A., [1986, 97p., rus] 41-3015

- Thermal break-up of frozen cohesive rocks. Mochalov, V.I., et al., [1986, p.68-69, rus] 41-3765

- Perfecting the methods of developing permafrost deposits in the North. Skuba, V.N., ed., [1986, 81p., rus] 41-4546

- Experimental thawing of the permafrost base beneath the reconstructed main body of the Chita-I heat and electric power plant. Abashev, N.V., et al., [1986, p.9-10, rus] 41-4617

See also: Artificial melting

**Ash**

See: Volcanic ash

**Asphalt concretes**

See: Bituminous concretes

**Asphalts**

See: Bitumens

**Atlantic Ocean**

- Climatic cycles as reflected in ice conditions of northern seas. Girdiuk, G.V., et al., [1986, p.122-127, rus] 41-119

- Using satellite data for calculating ocean-atmosphere heat transfer in the Newfoundland energy-active oceanic zone in winter. Rzhaplinskii, D.G., et al., [1986, p.32-41, rus] 41-1540

- Report of the International Ice Patrol in the North Atlantic. [1985, 90p., eng] 41-4576

**Atlases**

See: Maps

**Atmosphere**

See: Air masses; Atmospheric physics; Meteorology; Stratosphere

**Atmospheric circulation**

- Influence of atmospheric circulation on sea ice conditions. Aleksandrov, E.I., et al., [1986, p.118-122, rus] 41-118

- Wind regime over Golubin glacier during the ablation period. Kurochkin, I.U.N., [1986, p.170-174, rus] 41-129

- Arctic air pollution: an overview of current knowledge. Barrie, L.A., [1986, p.643-663, eng] 41-828

- Mesoscale circulations initiated by melting snow. Lin, C.A., et al., [1986, p.13,299-13,302, eng] 41-1026

- "LAGO-Katabatic" programme. André, J.C., et al., [1986, p.17-18, eng] 41-1074



- Sea ice and the antarctic winter atmospheric circulation. Mitchell, J.F.B., et al, [1986, p.953-969, eng] 41-1474
- Possible routes of pollution transport to the Arctic. Krasovskaya, T.M., [1986, p.93-96, rus] 41-1645
- Transport of continental radon. Polian, G., et al, [1986, p.178-189, eng] 41-1750
- Aerosol exchange in the remote troposphere. Hogan, A.W., [1986, p.197-213, eng] 41-1751
- Aerosol measurements at the South Pole. Bodhaine, B.A., et al, [1986, p.223-235, eng] 41-1753
- Proceedings of the International Conference on Polar Lows, 1986. [1986, 364p., eng] 41-1795
- Norwegian Polar Lows Project. Lystad, M., [1986, p.1-16, eng] 41-1796
- Different types of polar lows affecting Scandinavia. Rasmussen, E., [1986, p.17-29, eng] 41-1797
- Climatological study of gale-producing polar lows near Norway. Wilhelmssen, K., [1986, p.31-39, eng] 41-1798
- Low pressure weather systems in and around Norwegian waters. Bilello, M.A., [1986, p.53-66, eng] 41-1799
- Structure of polar lows over the Norwegian and the Barents Seas. Shapiro, M.A., [1986, p.79-90, eng] 41-1800
- Analysis of a polar low in the Norwegian Sea, 29 February-1 March 1984. Rabbe, A., [1986, p.91-103, eng] 41-1801
- Investigation of the use of TOVS-data in polar low research. Steffensen, M., [1986, p.119-129, eng] 41-1802
- Numerical simulations with an idealized model. Haugen, J.E., [1986, p.151-160, eng] 41-1803
- Heating by organized convection as a source of polar low amplification. Okland, H., [1986, p.161-176, eng] 41-1804
- Modelling of polar lows in an idealized environment. Aakjaer, P., [1986, p.177-186, eng] 41-1805
- Simulation of polar lows in the Norwegian Sea. Grönås, S., [1986, p.201-220, eng] 41-1806
- Various condensation schemes and their impact on the simulation of polar lows. Nordeng, T.E., [1986, p.221-233, eng] 41-1807
- Examples of the operational utility of radar observations of cold air vortices. Monk, G.A., et al, [1986, p.247-256, eng] 41-1808
- Polar low forecasting. Midtbø, K.H., [1986, p.257-271, eng] 41-1809
- Predicted hazard area for a polar low. Eidavik, K.J., [1986, p.273-277, eng] 41-1810
- Radar wave observations and the Norwegian Sea storm, Feb. 1984. Ross, D., et al, [1986, p.285-296, eng] 41-1811
- Big waves from polar lows. Dysthe, K.B., et al, [1986, p.297-309, eng] 41-1812
- Ocean wave phenomena observed with an adaptive multifrequency radar system. Gjessing, D.T., et al, [1986, p.311-327, eng] 41-1813
- Waves under a small travelling wave field. Carstens, T., et al, [1986, p.331-341, eng] 41-1814
- Environmental conditions under polar lows. Houbm, O.G., et al, [1986, p.343-357, eng] 41-1815
- Atmospheric modelling and air-sea interaction. Herman, G.F., [1986, p.713-754, eng] 41-2997
- Topographic Rossby waves over Antarctica. Egger, J., et al, [1987, p.110-115, eng] 41-3134
- Results of modeling high latitude climates. Nagurnyi, A.P., [1986, p.21-32, eng] 41-3263
- Aerosol properties in the atmospheric surface layer in Severnaya Zemlya archipelago. Timerev, A.A., [1986, p.108-113, rus] 41-3867
- Thermal regime of upper soil layers in the Kolyma Basin. Alifimov, A.V., [1985, p.9-29, rus] 41-4119
- Weddell-POLEX-81 observations of atmospheric circulation over the Atlantic. Lysakov, E.P., [1986, p.5-49, rus] 41-4186
- Influence of atmospheric circulation on the formation of Weddell polynya. Lysakov, E.P., et al, [1986, p.52-56, rus] 41-4187
- On the relationship between atmospheric circulation and the fluctuations in the sea ice extents of the Bering and Okhotsk seas. Cavaleri, D.J., et al, [1987, p.7141-7162, eng] 41-4267
- Determining the velocity of sea-surface wind from radar data of the KOSMOS-1500 satellite. Vol'pian, G.V., et al, [1987, p.3-11, rus] 41-4620
- Atmospheric composition**
- Alaskan atmospheric methane sources. Seabacher, D.L., et al, [1986, p.1-10, eng] 41-1259
- Trace metals in the snow of northern Sweden. Ross, H.B., et al, [1986, p.27-43, eng] 41-1260
- Ice core record of the C-13/C-12 ratio of atmospheric CO<sub>2</sub> in the past two centuries. Friedli, H., et al, [1986, p.237-238, eng] 41-1631
- Variation of sulfate content in Arctic atmospheric precipitation during the last 90 years. Astratov, M.I.U., et al, [1986, p.38-42, eng] 41-1690
- Atmospheres of icy bodies. Owen, T., [1985, p.731-740, eng] 41-1734
- Aerosol exchange in the remote troposphere. Hogan, A.W., [1986, p.197-213, eng] 41-1751
- Aerosol measurements at the South Pole. Bodhaine, B.A., et al, [1986, p.223-235, eng] 41-1753
- Stratospheric and tropospheric sources for nitrate in antarctic snow. Legrand, M.R., et al, [1986, p.236-249, eng] 41-1754
- Review of the history of atmospheric CO<sub>2</sub> recorded in ice cores. Oeschger, H., et al, [1986, p.89-108, eng] 41-2221
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskii, M.I.A., et al, [1986, 133p., rus] 41-2253
- Ice cores tell composition of ancient atmospheres. Stauffer, B., [1985, p.72-73, eng] 41-2632
- Methane flux from northern peatlands. Harriass, R.C., et al, [1985, p.652-654, eng] 41-2744
- Airborne measurements of the antarctic cloud water acidity. Saxena, V.K., et al, [1985, p.201-203, eng] 41-3323
- Aerosol transport processes in the Antarctic. Hogan, A.W., et al, [1985, p.205-206, eng] 41-3324
- Radioactive isotopes related to ice sheet accumulation and ablation. Lal, D., et al, [1987, p.4947-4952, eng] 41-3343
- Influence of reflections from atmospheric precipitation on the characteristics of radar images of sea ice. Aleksandrov, V.I.U., [1985, p.70-76, rus] 41-3431
- Planet Venus. Kondrat'ev, K.I.A., et al, [1987, 278p., rus] 41-3689
- Aerosol properties in the atmospheric surface layer in Severnaya Zemlya archipelago. Timerev, A.A., [1986, p.108-113, rus] 41-3867
- All-Union Conference on nuclear-physical methods of environmental management, 3rd, Tomak, May 21-23, 1985. Proceedings. [1987, 172p., rus] 41-3944
- Studying pollutant accumulation in air, snow and vegetation. Kazachevskii, I.V., et al, [1987, p.91-102, rus] 41-3947
- Ice-core CO<sub>2</sub> data and biotic CO<sub>2</sub> sources. Enting, I.G., et al, [1987, p.318-325, eng] 41-4207
- Atmospheric disturbances**
- Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., [1986, p.115-161, eng] 41-147
- Atmospheric physics**
- JARE 25 wintering party activities, 1984-1985. Hirasawa, T., [1986, p.113-137, jpn] 41-980
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskii, M.I.A., et al, [1986, 133p., rus] 41-2253
- Atmospheric pollution**
- See: Air pollution
- Atmospheric pressure**
- Proceedings of the International Conference on Polar Lows, 1986. [1986, 364p., eng] 41-1795
- Norwegian Polar Lows Project. Lystad, M., [1986, p.1-16, eng] 41-1796
- Different types of polar lows affecting Scandinavia. Rasmussen, E., [1986, p.17-29, eng] 41-1797
- Climatological study of gale-producing polar lows near Norway. Wilhelmssen, K., [1986, p.31-39, eng] 41-1798
- Low pressure weather systems in and around Norwegian waters. Bilello, M.A., [1986, p.53-66, eng] 41-1799
- Structure of polar lows over the Norwegian and the Barents Seas. Shapiro, M.A., [1986, p.79-90, eng] 41-1800
- Analysis of a polar low in the Norwegian Sea, 29 February-1 March 1984. Rabbe, A., [1986, p.91-103, eng] 41-1801
- Investigation of the use of TOVS-data in polar low research. Steffensen, M., [1986, p.119-129, eng] 41-1802
- Numerical simulations with an idealized model. Haugen, J.E., [1986, p.151-160, eng] 41-1803
- Heating by organized convection as a source of polar low amplification. Okland, H., [1986, p.161-176, eng] 41-1804
- Modelling of polar lows in an idealized environment. Aakjaer, P., [1986, p.177-186, eng] 41-1805
- Simulation of polar lows in the Norwegian Sea. Grönås, S., [1986, p.201-220, eng] 41-1806
- Various condensation schemes and their impact on the simulation of polar lows. Nordeng, T.E., [1986, p.221-233, eng] 41-1807
- Examples of the operational utility of radar observations of cold air vortices. Monk, G.A., et al, [1986, p.247-256, eng] 41-1808
- Polar low forecasting. Midtbø, K.H., [1986, p.257-271, eng] 41-1809
- Predicted hazard area for a polar low. Eidavik, K.J., [1986, p.273-277, eng] 41-1810
- Radar wave observations and the Norwegian Sea storm, Feb. 1984. Ross, D., et al, [1986, p.285-296, eng] 41-1811
- Big waves from polar lows. Dysthe, K.B., et al, [1986, p.297-309, eng] 41-1812
- Ocean wave phenomena observed with an adaptive multifrequency radar system. Gjessing, D.T., et al, [1986, p.311-327, eng] 41-1813
- Environmental conditions under polar lows. Houbm, O.G., et al, [1986, p.343-357, eng] 41-1815
- Forecasting sea ice movement through Bering Strait. Kozo, T.L., et al, [1987, p.193-207, eng] 41-3079
- Thermobaric and ice conditions, South Orkney region. Petrov, L.S., et al, [1986, p.59-65, eng] 41-3950
- Attenuation**
- Response of irradiated optical waveguides at low temperatures. Taylor, E.W., et al, [1981, p.40-50, eng] 41-581
- Cold-induced losses in loose-sheath fiber-optic cables. Holliday, V.M., et al, [1981, p.77-79, eng] 41-582
- Radio-wave attenuation in melting snow. Jain, Y.M., et al, [1985, p.68-69, eng] 41-1408
- Dielectric characteristics of snow in microwave frequency. Koizumi, S., et al, [1986, p.823-825, eng] 41-1467
- Numerical modeling of optical features of falling snow. Martinez-Sanchez, M., et al, [1983, p.78-85, eng] 41-2314
- Scattering corrections to extinction coefficients of falling snow. Winchester, L.W., Jr., et al, [1983, p.86-89, eng] 41-2315
- Visible and infrared transmission through snow. Seagraves, M.A., et al, [1983, p.90-93, eng] 41-2316
- Obscuration by helicopter-produced snow clouds. Ebersole, J.F., [1983, p.94-99, eng] 41-2317
- Analytical model for assessing atmospheric effects in remote sensing. Li, S., [1986, 151p., eng] 41-2585
- Scattering and attenuation of millimeter wavelength radiation by snow. O'Brien, S.G., [1986, 138p., eng] 41-2644
- Ultrasonic attenuation and dislocation damping in crystals of ice. Tamura, J., et al, [1986, p.3445-3461, eng] 41-2975
- Effect of snow on vehicle-generated seismic signatures. Albert, D.G., [1987, p.881-887, eng] 41-3887
- Role of fracture in the attenuation rate of stress waves in snow. Hansen, A.C., et al, [1987, p.207-212, eng] 41-4496
- Augers**
- Snow caster having ring gear and spur gear drive means. Schlapman, W.J., [1983, 8 col., eng] 41-1984
- Austria**
- Current problems on avalanche research in France, Japan and Austria. Kronfellner-Kraus, G., [1984, p.151-154, ger] 41-710
- Avalanche statistics in Austria. Merwald, I., [1984, p.191-204, ger] 41-714
- Alps**
- Glaciers of the Austrian Alps, 1983/84. Patzelt, G., [1984, p.207-221, ger] 41-636
- Changes in volume and elevation of glaciers, Vernagtferner, Austria. Reinhardt, W., et al, [1986, p.151-155, eng] 41-759
- Hinterferner**
- Snow chemistry of an Austrian glacier. Psennner, R., et al, [1986, p.1-18, eng] 41-3522
- Innsbruck**
- Avalanche forecasting tests near Innsbruck. Lackinger, B., [1986, p.79-87, ger] 41-3528
- Otztal Alps**
- Strain rate measurements on a firn pit, Austria. Eisner, H., et al, [1984, p.169-176, eng] 41-633
- Pasterze**
- Follow-up measurements of Pasterze (Glockner group) in 1984. Wakonig, H., [1984, p.223-228, ger] 41-637
- Steiermark**
- Winter service in Steiermark, Austria. Dimböck, G., [1985, p.17-21, ger] 41-386
- Vernagtferner**
- Ice thickness and structure of the Vernagtferner, Austrian Alps. Blindow, N., et al, [1986, p.43-60, eng] 41-3525
- Automobiles**
- See: Motor vehicles
- Avalanche deposits**
- Forest and avalanches. Sonnier, J., [1985, p.53-58, fre] 41-864
- Avalanche on Mont Canigou, Pyrenees, 1986. Agüera, J.M., et al, [1986, p.13-24, fre] 41-870
- Powder snow avalanche in the Niigata Prefecture, 1986. Izumi, K., et al, [1986, p.168-170, jpn] 41-1221
- Test of avalanche runout equations. Martinelli, M., Jr., [1986, p.19-33, eng] 41-1301
- Determining dynamic properties of avalanches on the basis of simple field information. Runich, A.V., [1986, p.169-171, rus] 41-1663
- Snow-halting nets on Mt. Bondone. Fait, P., et al, [1986, p.56-61, ita] 41-2238
- Analytical study of powder snow avalanches. Fukushima, Y., [1986, p.189-197, jpn] 41-2602
- Model of snow glide acceleration to full depth avalanche release. Nohguchi, Y., et al, [1986, p.169-180, jpn] 41-3008
- Collection of case histories of avalanche accidents. [1984, var.p., eng] 41-3243
- Shear flow of granular materials as applied to avalanches. Szidrovsky, F., et al, [1986, 105p., eng] 41-3337
- Avalanche data, 1985-1986 season. David, P., et al, [1986, p.3-16, fre] 41-3356
- First "Snow Control Institute". Brugnot, G., [1987, p.35-38, fre] 41-3420
- Fundamentals of avalanche science. Bozhinskii, A.N., et al, [1987, 280p., rus] 41-4129
- Statistical and geometrical definition of snow avalanche runout. McClung, D.M., et al, [1987, p.107-119, eng] 41-4488



**Avalanche deposits (cont.)**

- Mobility of large-scale avalanche. Izumi, K., [1985, p.187-194, jpn] 41-4587
- Movement of a powder snow avalanche as recorded on a seismograph. Izumi, K., et al, [1985, p.99-104, jpn] 41-4592
- Remnants of snow avalanche during the snowmelt season. Kobayashi, S., et al, [1985, p.105-109, jpn] 41-4593
- Avalanche engineering**
- Analysis and monitoring of avalanche glaciersystems. Kanaev, L.A., [1986, p.43-53, rus] 41-104
- Avalanches and avalanche snow loads. Moskalev, I.U.D., [1986, 157p., rus] 41-651
- Snow physics, avalanches, mudflows. Bolov, V.R., ed., [1985, 108p., rus] 41-836
- Devices for measuring snow avalanche velocities. Bagov, M.M., et al, [1985, p.22-30, rus] 41-840
- Soviet glaciological studies in 1985. Kotliakov, V.M., et al, [1986, p.3-10, rus] 41-1632
- Mathematical modeling for determining avalanche spread boundaries. Volodicheva, N.A., et al, [1986, p.78-81, rus] 41-1642
- Methods of compiling maps of the factors affecting avalanche formation in areas outside the USSR for the World Atlas of Snow and Ice Resources. Dziuba, V.V., [1986, p.81-86, rus] 41-1643
- Determining dynamic properties of avalanches on the basis of simple field information. Runich, A.V., [1986, p.169-171, rus] 41-1663
- Natural environment and economics of Kuzbass (preprints of summaries for the conference). Udodov, V.P., ed., [1984, 184p., rus] 41-1904
- General characteristics of avalanche formation and danger in Kuznetskiy Alatau. Shpin', P.S., [1984, p.55-57, rus] 41-1905
- Flexible culverts in snow avalanche protection for roads. Oslid, H., [1986, p.19-21, eng] 41-2262
- Estimating avalanche formation danger and preventive triggering. Vlasov, E.V., et al, [1986, p.53-54, rus] 41-2559
- Results of studying avalanches in the Magadan region. Korenev, V.G., [1986, p.63-72, rus] 41-2650
- Protection of roads from snow avalanches. Diunin, A.K., et al, [1987, 61p., rus] 41-3734
- Fundamentals of avalanche science. Bozhinskii, A.N., et al, [1987, 280p., rus] 41-4129
- Engineering protection of mountainous regions from dangerous glacial processes. Grakovich, V.F., et al, [1986, p.102-104, 214-216, rus] 41-4350
- See also: Snow fences
- Avalanche erosion**
- Bibliography of landslides in Alaska. Galloway, J.P., [1986, 54p., eng] 41-797
- Restoration of mountain soils, more than a century old activity. Sonnier, J., [1986, p.25-38, fre] 41-871
- Relation between the susceptibility of permafrost landscapes and topographic dissection. Klimovskii, I.V., et al, [1986, p.113-121, rus] 41-3492
- Avalanche forecasting**
- Forecasting wet snow avalanches from meteorological data. Drozdovskaya, N.F., et al, [1986, p.32-39, rus] 41-773
- Method of forecasting fresh snow avalanches in the Talasskiy Alatau. Borcheninova, T.M., [1986, p.39-43, rus] 41-774
- Methods of measuring elastic wave parameters in snow samples. Bagov, M.M., [1985, p.7-14, rus] 41-838
- Organization of avalanche risk forecasting. Current status and prospects. Pahaut, E., [1985, p.17-32, fre] 41-861
- Special forecasts of avalanche danger and possibilities of controlling snow and avalanche phenomena. Bolov, V.R., [1986, p.171-176, rus] 41-1664
- Avalanche warning bulletins. Cagnati, A., [1986, p.20-27, ita] 41-2234
- Avalanche forecasting tests near Innsbruck. Lackinger, B., [1986, p.79-87, ger] 41-3528
- Aspect and elevation effects on the structure of the seasonal snowcover in Colorado. Dexter, L.L., [1987, 250p., eng] 41-3800
- Fundamentals of avalanche science. Bozhinskii, A.N., et al, [1987, 280p., rus] 41-4129
- Avalanche formation**
- Accuracy of calculations of snow depth in avalanche catchments. Chernous, P.A., et al, [1986, p.201-206, rus] 41-135
- Methods of compiling medium-scale maps of genetic avalanche types. Dziuba, V.V., et al, [1986, p.206-211, rus] 41-136
- Avalanches in the Niigata Prefecture, Japan, 1986. Kobayashi, S., [1986, p.87-91, jpn] 41-442
- Snow avalanche atlas, Seward Highway, south-central Alaska. March, G.D., et al, [1982, 168p., eng] 41-560
- Ice avalanches and a landslide on Grosser Aletschgletscher. Alean, J., [1984, p.9-25, eng] 41-622
- Avalanches and avalanche snow loads. Moskalev, I.U.D., [1986, 157p., rus] 41-651
- Estimating snow reserves, avalanches, runoff and water balance in the Kyzylchi River basin (based on aerial photography). Gapiashko, V.G., [1986, p.19-23, rus] 41-699
- Snow and avalanche measuring techniques. Neubauer, F., [1984, p.175-179, ger] 41-712
- Avalanche statistics in Austria. Merwald, I., [1984, p.191-204, ger] 41-714
- Snow cover and weather conditions. Schaffhauser, H., [1984, p.205-224, ger] 41-715
- Avalanches with and without protective structures. Rychetnik, J., [1985, p.197-208, ger] 41-716
- Use of microcomputer system for snow slide measurements. Lackinger, G., [1985, p.223-226, ger] 41-718
- Composition and structure of the special data bank "Snow cover in mountains". Tsarev, B.K., [1986, p.3-10, rus] 41-770
- Method of calculating the warm-up date of snow cover. Brukhanda, V.I., et al, [1986, p.10-23, rus] 41-771
- Classification of dry and wet snow avalanches. Kharitonov, G.G., [1986, p.23-32, rus] 41-772
- Forecasting wet snow avalanches from meteorological data. Drozdovskaya, N.F., et al, [1986, p.32-39, rus] 41-773
- Method of forecasting fresh snow avalanches in the Talasskiy Alatau. Borcheninova, T.M., [1986, p.39-43, rus] 41-774
- Snow avalanches in Iceland in the 1982-1983 winter. Jónsson, H.H., [1984, p.159-164, ice] 41-808
- Time of snow relaxation. Runich, A.V., [1985, p.3-7, rus] 41-837
- Analysis of costs of artificial avalanche triggering. Bolov, V.R., [1985, p.34-39, rus] 41-842
- Mudflow formation and transformation processes in the Gerkhzhansu River basin. Dokukin, M.D., [1985, p.58-71, rus] 41-845
- French insurance industry facing avalanche risks. Nicolet, D., [1985, p.47-52, fre] 41-863
- Restoration of mountain soils, more than a century old activity. Sonnier, J., [1986, p.25-38, fre] 41-871
- Powder snow avalanche in the Niigata Prefecture, 1986. Izumi, K., et al, [1986, p.168-170, jpn] 41-1221
- Outline of avalanches in China. Wang, Y., et al, [1986, p.11-18, eng] 41-1300
- Test of avalanche runoff equations. Martinelli, M., Jr., [1986, p.19-33, eng] 41-1301
- Multi-basin avalanche simulation: a model. Judson, A., et al, [1986, p.35-47, eng] 41-1302
- Methods of compiling maps of the factors affecting avalanche formation in areas outside the USSR for the World Atlas of Snow and Ice Resources. Dziuba, V.V., [1986, p.81-86, rus] 41-1643
- Avalanche. Strauss, W., [1985, p.26-27, eng] 41-1838
- Natural environment and economics of Kuzbass (preprints of summaries for the conference). Udodov, V.P., ed., [1984, 184p., rus] 41-1904
- General characteristics of avalanche formation and danger in Kuznetskiy Alatau. Shpin', P.S., [1984, p.55-57, rus] 41-1905
- Mapping of mountain hazards. Ives, J.D., [1986, p.111-124, eng] 41-1977
- What triggers an avalanche. Marbouty, D., [1986, p.125-142, eng] 41-1978
- Avalanche warning bulletins. Cagnati, A., [1986, p.20-27, ita] 41-2234
- Building yard trials for avalanche protection structures. Menegus, F., et al, [1986, p.28-36, ita] 41-2235
- Enigmas of avalanche protection structures. Balzaretto, P., [1986, p.38-43, ita] 41-2236
- Technico-economical aspects of elastic snow fences. Sommarivilla, F., [1986, p.44-55, ita] 41-2237
- Snow-halting nets on Mt. Bondone. Fait, P., et al, [1986, p.56-61, ita] 41-2238
- Modification of sounding methods in organized search for avalanche victims. Telmon, L., [1986, p.64-69, ita] 41-2239
- Snow and avalanches in the Swiss Alps, winter 1984-85. [1986, 172p., ger] 41-2290
- Snow and avalanches in the Davos region. Föhn, P., et al, [1986, p.29-44, ger] 41-2291
- Snow and avalanche conditions in the Swiss Alps. Gliott, S., et al, [1986, p.45-106, ger] 41-2292
- Accidents and damage due to avalanches in the Swiss Alps. Etter, H.-J., [1986, p.107-161, ger] 41-2293
- Avalanche accidents outside the Swiss Alps. Gliott, S., [1986, p.162-171, ger] 41-2294
- Avalanches and meteorology in Austria, 1984/85 and 1985/86 winters. Hauk, E., et al, [1986, 90p., ger] 41-2492
- Estimating avalanche formation danger and preventive triggering. Vlasov, E.V., et al, [1986, p.53-54, rus] 41-2559
- Criteria for scaling rock and avalanche defense structures. Menegus, F., et al, [1986, 146p., ita] 41-2568
- Results of studying avalanches in the Magadan region. Korenev, V.G., [1986, p.63-72, rus] 41-2650
- Traveling path of snow avalanche on real configuration (1). Nohguchi, Y., [1986, p.147-168, jpn] 41-3007
- Avalanche data, 1985-1986 season. David, P., et al, [1986, p.3-16, fre] 41-3356
- Preventive avalanche triggering by helicopter. [1986, p.55-60, fre] 41-3358
- Avalanche accidents in the Alps; variations during the decade 1975-1985. Valla, F., [1987, p.3-14, fre] 41-3417
- Skiing accidents due to meteorological conditions. Rey, L., [1987, p.15-24, fre] 41-3418
- Hount Nègre avalanche of Jan. 31, 1986 at Barèges and Sers. Marie, R., et al, [1987, p.25-34, fre] 41-3419
- Firat "Snow Control Institute". Brugno, G., [1987, p.35-38, fre] 41-3420
- Satellite methods of studying avalanche formation. Laptev, M.N., et al, [1986, p.43-49, rus] 41-3516
- Protection of roads from snow avalanches. Diunin, A.K., et al, [1987, 61p., rus] 41-3734
- Fluid dynamical analysis of powder snow avalanches at Maseguchi in Niigata. Fukushima, Y., [1987, p.1-8, jpn] 41-3753
- On the denudation of surface avalanche. Yamada, Y., [1987, p.115-131, jpn] 41-4004
- Ski areas and roads protected by precautionary defense from avalanches. Minetti, G., [1987, p.47-50, ita] 41-4105
- Avalanches and countermeasures, Vail, Colorado. Oaks, S.D., et al, [1987, p.157-168, eng] 41-4127
- Fundamentals of avalanche science. Bozhinskii, A.N., et al, [1987, 280p., rus] 41-4129
- Field test to assess snow-slope stability. Conway, H., et al, [1986, p.535-537, eng] 41-4310
- Mobility of large-scale avalanche. Izumi, K., [1985, p.187-194, jpn] 41-4587
- Remnants of snow avalanche during the snowmelt season. Kobayashi, S., et al, [1985, p.105-109, jpn] 41-4593
- Avalanche mechanics**
- Avalanches and avalanche snow loads. Moskalev, I.U.D., [1986, 157p., rus] 41-651
- Snow and avalanche research at the University of Innsbruck. Lackinger, B., [1984, p.155-173, ger] 41-711
- Snow and avalanche measuring techniques. Neubauer, F., [1984, p.175-179, ger] 41-712
- Methods of measuring avalanche velocity using laser range finders. Urumbaev, N.A., et al, [1985, p.15-22, rus] 41-839
- Devices for measuring snow avalanche velocities. Bagov, M.M., et al, [1985, p.22-30, rus] 41-840
- Electromagnetic irradiance during avalanche movement. Mikhnevskii, N.D., et al, [1985, p.31-34, rus] 41-841
- Motion resistance of avalanches on smooth paths. Glenne, B., [1986, p.115-119, eng] 41-1282
- Mathematical modeling for determining avalanche spread boundaries. Volodicheva, N.A., et al, [1986, p.78-81, rus] 41-1642
- Methods of compiling maps of the factors affecting avalanche formation in areas outside the USSR for the World Atlas of Snow and Ice Resources. Dziuba, V.V., [1986, p.81-86, rus] 41-1643
- Determining dynamic properties of avalanches on the basis of simple field information. Runich, A.V., [1986, p.169-171, rus] 41-1663
- Natural environment and economics of Kuzbass (preprints of summaries for the conference). Udodov, V.P., ed., [1984, 184p., rus] 41-1904
- General characteristics of avalanche formation and danger in Kuznetskiy Alatau. Shpin', P.S., [1984, p.55-57, rus] 41-1905
- Analytical study of powder snow avalanches. Fukushima, Y., [1986, p.189-197, jpn] 41-2602
- Model for flow avalanches. Hutter, K., et al, [1986, p.87-112, eng] 41-3300
- Shear flow of granular materials as applied to avalanches. Szidarovszky, F., et al, [1986, 105p., eng] 41-3337
- Fluid dynamical analysis of powder snow avalanches at Maseguchi in Niigata. Fukushima, Y., [1987, p.1-8, jpn] 41-3753
- On the denudation of surface avalanche. Yamada, Y., [1987, p.115-131, jpn] 41-4004
- Traveling path of snow avalanche on real configuration II. Nohguchi, Y., [1987, p.133-152, jpn] 41-4005
- Equation for avalanche motion restricted by a diversion barrier. Nohguchi, Y., [1987, p.153-162, jpn] 41-4006
- Fundamentals of avalanche science. Bozhinskii, A.N., et al, [1987, 280p., rus] 41-4129
- Flow of granular material down an inclined plane. Flow avalanche model pt. 2: numerical results. Hutter, K., et al, [1987, p.239-261, eng] 41-4205
- Statistical and geometrical definition of snow avalanche runoff. McClung, D.M., et al, [1987, p.107-119, eng] 41-4488
- Movement of a powder snow avalanche as recorded on a seismograph. Izumi, K., et al, [1985, p.99-104, jpn] 41-4592
- Avalanche modeling**
- Analytical study of powder snow avalanches. Fukushima, Y., [1986, p.189-197, jpn] 41-2602
- Avalanche tracks**
- Snow avalanche atlas, Seward Highway, south-central Alaska. March, G.D., et al, [1982, 168p., eng] 41-560
- Avalanche statistics in Austria. Merwald, I., [1984, p.191-204, ger] 41-714
- Floristic patterns on avalanche paths in the northern Rocky Mountains, USA. Manolson, G.P., et al, [1986, p.231-238, eng] 41-1257
- Motion resistance of avalanches on smooth paths. Glenne, B., [1986, p.115-119, eng] 41-1282

- Test of avalanche runoff equations. Martinelli, M., Jr., 1986, p.19-33, eng 41-1301
- Traveling path of snow avalanche on real configuration (I). Nohguchi, Y., 1986, p.147-168, jpn 41-3007
- Traveling path of snow avalanche on real configuration II. Nohguchi, Y., 1987, p.133-152, jpn 41-4005
- Avalanche triggering**
- Meteorology and climatology of snow avalanches in Montana. Butler, D.R., 1986, p.72-87, eng 41-73
- Method of forecasting fresh snow avalanches in the Talasskiy Alatau. Borcheninova, T.M., 1986, p.39-43, rus 41-774
- Analysis of costs of artificial avalanche triggering. Bolov, V.R., 1985, p.34-39, rus 41-842
- Mudflow formation and transformation processes in the Gerkhozhansu River basin. Dokukin, M.D., 1985, p.58-71, rus 41-845
- Natural environment and economics of Kuzbass (preprints of summaries for the conference). Udodov, V.P., ed., 1984, 184p., rus 41-1904
- General characteristics of avalanche formation and danger in Kuznetzkiy Alatau. Shipin, P.S., 1984, p.55-57, rus 41-1905
- What triggers an avalanche. Marbouty, D., 1986, p.125-142, eng 41-1978
- Estimating avalanche formation danger and preventive triggering. Vlasov, E.V., et al., 1986, p.53-54, rus 41-2559
- Results of studying avalanches in the Magadan region. Korenev, V.G., 1986, p.63-72, rus 41-2650
- Preventive avalanche triggering by helicopter. 1986, p.55-60, fre 41-3358
- Protection of roads from snow avalanches. Diunin, A.K., et al., 1987, 61p., rus 41-3734
- Ski areas and roads protected by precautionary defense from avalanches. Minetti, G., 1987, p.47-50, ita 41-4105
- Fundamentals of avalanche science. Bozhinskii, A.N., et al., 1987, 280p., rus 41-4129
- Avalanche wind**
- Fundamentals of avalanche science. Bozhinskii, A.N., et al., 1987, 280p., rus 41-4129
- Avalanches**
- Characteristics of the casualties due to snow in the snowy areas. Kuriyama, H., 1986, p.79-94, jpn 41-81
- Analysis and monitoring of avalanche glaciersystems. Kanev, L.A., 1986, p.43-53, rus 41-104
- Genetic types of snow avalanches in Dzhungarskiy Alatau. Dziuba, V.V., 1986, p.186-190, rus 41-132
- Experience in compiling and using complex engineering geological maps. Osokin, N.I., et al., 1986, p.213-219, rus 41-137
- Engineering-geological observation polygons for studies and control of human factors impact on the development of exogenic processes. Nizozov, R.A., 1986, p.70-79, rus 41-602
- Current problems on avalanche research in France, Japan and Austria. Kronfellner-Kraus, G., 1984, p.151-154, ger 41-710
- Rock avalanches in Huascaran Mountain, Peru. Körner, H., 1985, p.233-247, ger 41-720
- Avalanche balance in France, Oct. 1, 1984-Sep. 30, 1985. Pahaut, E., 1985, p.3-16, fre 41-860
- Avalanche atlas: illustrated international avalanche classification. 1981, 265p., eng 41-1158
- Annotated list of Soviet literature on glaciology for 1987. Kotliakov, V.M., et al., 1986, p.199-228, rus 41-1668
- Engineering geology in construction. Ziangirov, R.S., et al., 1986, 175p., rus 41-2889
- Characteristics of two Scottish avalanches. Davison, R.W., et al., 1987, p.51-54, eng 41-3595
- Periodic ice cliff avalanche, Ellesmere Island. Evans, D.J.A., et al., 1987, p.68-71, eng 41-3598
- Ice avalanches on Soler Glacier, Patagonia. Kobayashi, S., et al., 1987, p.87-90, eng 41-3831
- Significance of rock glaciers in the formation and development of lakes in the Tien Shan highlands. Tarakanov, A.G., 1985, p.137-145, rus 41-3871
- History of high-magnitude snow avalanches, southern Glacier National Park, Montana, U.S.A. Butler, D.R., et al., 1985, p.175-182, eng 41-3969
- Dangerous glacial slope processes in mountain ecosystems of Siberia. Laptev, M.N., et al., 1986, p.63-65, rus 41-4065
- Engineering protection of mountainous regions from dangerous glacial processes. Grakovich, V.F., et al., 1986, p.102-104, 214-216, rus 41-4350
- See also: Snow slides
- Backscattering**
- Scattering at mm wavelengths from *in situ* snow. Walsh, J., et al., 1986, p.1.6.1-1.6.2, eng 41-95
- Mm wave backscatter from snow on the surface at 35 and 94 GHz. Trostel, J.M., et al., 1986, p.6.3.1-6.3.5, eng 41-98
- Radar backscatter from land, sea, rain and snow at millimeter wave length. Dyer, F.B., et al., 1985, p.250-254, eng 41-1360
- Radar backscatter from summer and ridged sea ice, and design of short-range radars. Gogineni, S.P., 1985, 142p., eng 41-2580
- Relation of millimeter-wavelength backscatter to surface snow properties. Williams, L.D., et al., 1987, p.188-194, eng 41-3318
- Bacteria**
- Bacterial populations in soils of a subantarctic island. French, D.D., et al., 1986, p.75-82, eng 41-501
- Pseudomonas genus of bacteria isolated from Antarctic ice sheets. Sorokina, T.A., et al., 1986, p.494-504, rus 41-1824
- Heterotrophic bacteria from soils of Arctic East Siberian tundra. Velikova, V.L., 1986, p.613-616, rus 41-1826
- Bacterial plankton in the ecosystems of pelagic zones of the Barents and White seas. Teplinskaya, N.G., 1986, p.18-20, rus 41-2388
- Modification of bottle bathometer for studying bacterioplankton at shallow depths. Bafta, V.A., 1986, p.53-55, rus 41-2389
- Nitrogen-fixing pseudomonads from Arctic plant roots. Lifshitz, R., et al., 1986, p.251-255, eng 41-2493
- Biologic activity of forest soils. Korsunov, V.M., ed., 1985, 122p., rus 41-4109
- Microflora in forest soils of the Lower Angara depression. Vishniakova, Z.V., et al., 1985, p.88-101, rus 41-4112
- Microorganisms found in Alpine soils, snow cover and streams. Dobrovol'skaia, N.G., et al., 1985, p.77-81, rus 41-4562
- Pseudomonas bacteria from an antarctic glacial ice sheet. Sorokina, T.A., et al., 1987, p.288-297, eng 41-4610
- Baffin Bay**
- Oceanographic cruise to Baffin Bay and Nares Strait, Sep. 1986. Bourke, R.H., 1986, 23p., eng 41-2609
- Balloons**
- Balloon observation of aerosols in the antarctic troposphere and stratosphere. Ito, T., et al., 1986, p.214-222, eng 41-1752
- Banks (waterways)**
- Bank conditions and erosion along selected reservoirs. Gatto, L.W., et al., 1987, p.143-154, eng 41-2495
- Riverbank erosion in the Colville Delta, Alaska. Walker, J., et al., 1987, p.61-70, eng 41-3555
- River bank erosion and the influence of frost: a statistical examination. Lawler, D.M., 1986, p.227-242, eng 41-4365
- See also: Shores
- Barents Sea**
- Climatic cycles as reflected in ice conditions of northern seas. Girdiuk, G.V., et al., 1986, p.122-127, rus 41-119
- Ice on northern seas and wind in equatorial stratosphere. Sheremet'evskaya, O.I., 1986, p.128-131, rus 41-120
- Sea ice fields in the Barents Sea. Vinje, T.E., 1985, 26p. + map, eng 41-247
- Photo-control tie of the SMP-32 to the MSU-S data and some reflection spectra characteristics of natural objects. Dosov, V.N., et al., 1985, p.57-66, rus 41-1040
- Hydrocarbons and future exploitation in Norwegian and Barents Seas. Bergsager, E., 1986, p.64-93, eng 41-2266
- Barometric pressure**
- See: Atmospheric pressure
- Barrier ice**
- See: Ice shelves
- Basal sliding**
- Mass balance and sliding velocity of the Puget lobe, Cordilleran ice sheet. Booth, D.B., 1986, p.269-280, eng 41-1189
- Glaciological research: trends and proposals. Saibee, C., 1985, p.68-72, ita 41-3175
- Longitudinal stresses and basal sliding: a comparative study. Van der Veen, C.J., 1987, p.223-248, eng 41-3283
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al., 1987, p.249-285, eng 41-3284
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al., 1987, p.293-320, eng 41-3286
- Basal sliding and drift deformation in a China glacier. Echelmeyer, K., et al., 1987, p.83-98, eng 41-3601
- Characteristics of ice flow of Soler Glacier, Patagonia. Naruse, R., 1987, p.79-85, eng 41-3830
- Evidence for two zones of debris entrainment beneath the Greenland ice sheet. Sugden, D.E., et al., 1987, p.238-241, eng 41-4227
- Stress-gradient coupling in glacier flow: IV. Effects of the "T" term. Kamb, B., et al., 1986, p.342-349, eng 41-4286
- Isotopic fractionation at the base of polar and sub-polar glaciers. Boulton, G.S., et al., 1986, p.475-485, eng 41-4303
- Bases**
- See: Permafrost bases
- Basins**
- See: River basins
- Baykal-Amur railroad**
- Subdivision of the Bam zone according to vegetational cover. Belov, A.V., ed., 1985, 181p., rus 41-252
- Estimating the deformation of low-loaded structures in the BAM zone. Sobin, G.P., 1985, p.28-30, rus 41-288
- Building mobile structures on northern BAM sites. Makeev, A.M., et al., 1986, p.21-23, rus 41-1533
- Mobile power plants used in northern and remote regions. Taits, V.G., 1986, p.31-34, rus 41-1536
- Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al., 1986, p.37-49, rus 41-1537
- Thermophysical properties of ground containing coarse clastic inclusions. Gavril'ev, R.I., 1986, p.60-71, rus 41-1538
- Improvement of structures, methods of design, and construction of railroad electrification, signalization and centralization block and communication systems. Shurygin, V.P., ed., 1985, p.121p., rus 41-1541
- Heat transfer between concrete power line supports and permafrost. Tsukanov, N.A., et al., 1985, p.21-32, rus 41-1543
- Snow cover effect on some cryogenic processes in the BAM zone. Poznanin, V.L., 1986, p.125-128, rus 41-1652
- Trends in the development of new mining regions. Agranat, G.A., 1986, p.14-25, rus 41-1821
- Bridge construction under severe climatic conditions. Velnblat, B.M., et al., 1986, p.9-11, rus 41-1887
- Light one-layer concrete enclosures designed for the North. Makarova, N.A., et al., 1986, p.36-37, rus 41-1889
- Safety measures for electric-power objects of the South Yakutia Task Economic Complex. Sedalishchev, V.A., et al., 1985, p.91-99, rus 41-1926
- Permafrost distribution and temperature from aerial surveys and spaceborne photography. Gavrilov, A.V., 1986, p.58-76, rus 41-2086
- Classifying northern areas according to fitness for mass construction. Nistratova, T.A., 1986, p.200-206, rus 41-2101
- Water resources of the BAM zone. Sokolov, A.A., 1986, 166p. (pertinent p.146-151), rus 41-2228
- Some problems in rationalizing the use of natural resources in the BAM zone. Mikhailov, I.U.P., 1986, p.35-44, rus 41-2248
- Development and regime of thermal erosion in the BAM zone. Poznanin, V.L., 1986, p.138-142, rus 41-2831
- Baykal-Amur line—a railroad discloses Siberia. Karger, A., 1985, p.38-48, ger 41-3077
- Mapping frozen strata in troughs of the BAM zone. An, V.V., et al., 1986, p.106-113, rus 41-3491
- Transportation in regions of new economic development. Prokof'eva, T.A., et al., 1986, 208p., rus 41-3663
- Hydrologic calculations for economic development of the BAM zone. Evstigneev, V.M., et al., 1986, p.156, rus 41-3983
- Discussion on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al., 1987, p.120, rus 41-4623
- Beach erosion**
- See: Shore erosion
- Beaches**
- Nearshore sediments of eastern Baffin Island. Emory-Moore, M., 1986, 55p., eng 41-245
- Use of dispersants for oil spill countermeasures on arctic beaches. Owens, E.H., et al., 1984, p.324-337, eng 41-895
- Coastal features of Canadian inland seas. Martini, J.P., 1986, p.117-142, eng 41-2594
- Bearing strength**
- Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al., 1986, p.175-196, eng 41-1095
- Recent developments in the analysis of floating ice plates. Vinogradov, A.M., 1986, p.228-240, eng 41-1099
- Field performance of an ice force panel for *in situ* and structural measurements. Witney, K.C., et al., 1986, p.241-261, eng 41-1100
- Sea ice testing in flexure—the importance of shear deformations. Murat, J.R., et al., 1986, p.209-224, eng 41-1593
- Official specifications for ice roads and actual bearing capacity. Palosuo, E., 1984, p.18-19, fin 41-1937
- Current ice road and structure design and construction procedures. Masterson, D.M., et al., 1986, p.602-648, eng 41-2048
- Bearing capacity of asphalt pavement at low temperature. Kasahara, A., et al., 1987, p.367-396, eng 41-4029
- See also: Ice cover strength; Snow strength; Trafficability
- Beaufort Sea**
- Data on ice mechanics from remote sensing, Beaufort Sea. Gower, J.F.R., et al., 1986, p.509-522, eng 41-162
- Sea ice concentration and ice edge position using remote sensing. Williams, D.R.P., 1986, p.526-536, eng 41-163
- Ice monitoring and forecasting for the BeauDril Kulluk. Eley, F.J., 1986, p.598-614, eng 41-169
- Dome-Canmar's operational ice-forecasting system for the Beaufort Sea. Steen, J.W., et al., 1986, p.615-650, eng 41-170
- Research priorities in Canadian waters. Goddins, D.O., 1986, p.295-332, eng 41-251
- Testing of an oil recovery concept for use in brash and mulched ice. 1986, 43p., eng 41-269

**Beaufort Sea (cont.)**

- Behaviour and fate of arctic oil spills. Bobra, A.M., et al, 1986, p.13-23, eng 41-341
- Monitoring seasonal changes in seafloor temperature and salinity. Sellmann, P.V., et al, 1986, p.110-114, eng 41-369
- Spray-ice islands evaluated for Arctic-drilling structures. Juvkam-Wold, H.C., 1986, p.57-66, eng 41-646
- Geologic report for the Beaufort Sea planning area, Alaska. Craig, J.D., et al, 1985, 192p. + maps, eng 41-694
- Ice effects on arctic offshore structures. Bruce, J.C., et al, 1983, p.14-15, eng 41-788
- 1984 field studies, Beaufort and Chukchi Seas, conducted from the NOAA ship *Discoverer*. Miley, J.M., ed, 1986, 57p. + figs, eng 41-831
- Ice pack motion from AVHRR imagery. Ninnis, R.M., et al, 1986, p.10,725-10,734, eng 41-1012
- Integrated ice monitoring system for Arctic offshore drilling. Leavitt, E., et al, 1986, p.107-118, eng 41-1093
- Arctic kiosk hopper dredges. Brakel, J., et al, 1986, p.988-1000, eng 41-1142
- Final report on freezeup studies, RU 205. 1986, var.p., eng 41-1208
- Anchor ice and bottom-freezing in marine sedimentary environments. Reimnitz, E., et al, 1986, 21p., eng 41-1209
- Flume studies and field observations of the interaction of frazil ice and anchor ice with sediment. Kempema, E.W., et al, 1986, 48p., eng 41-1210
- Shuik ice as a geologic agent. Reimnitz, E., et al, 1986, 19p., eng 41-1211
- Canadian Beaufort Sea 1984 repetitive mapping of ice scour. Shearer, J., et al, 1986, 43p. + appenda. + maps, eng 41-1566
- Construction of the mobile drilling platform (Super CIDS) for Arctic use. Maruyama, K., et al, 1985, p.89-102, eng 41-1571
- Surface winds and buoy drift, eastern Beaufort Sea coast. Kozo, T.L., et al, 1986, p.13,011-13,032, eng 41-1860
- Outfall mixing design in shallow coastal water under Arctic ice cover. Jirka, G.H., et al, 1985, p.856-862, eng 41-1913
- Advanced radar systems for support of Arctic marine operations. Mercer, J.B., et al, 1986, p.839-858, eng 41-2061
- First offshore drilling in the Beaufort Sea. Todd, M.B., 1978, p.399-405, eng 41-2125
- Caisson based island drilling platform, Beaufort Sea. De Jong, J.J.A., et al, 1978, p.2111-2120, eng 41-2126
- Beaufort Sea atlas. Mungall, C., 1986, p.10-11, eng 41-2199
- United States offshore developments in the Bering and Beaufort Seas. Kelly, P.L., 1986, p.124-148, eng 41-2269
- SSDC/MAT—an international operation. 1987, p.3-5, eng 41-2319
- Endicott slope protection design and construction. Munday, J.P., et al, 1987, p.47-54, eng 41-2401
- Forecasting summer ice conditions in the Beaufort Sea. Pritchard, R.S., et al, 1987, p.371-377, eng 41-2445
- Drilling and sampling offshore permafrost. Ruffell, J.P., 1986, p.11-15, eng 41-2509
- Subsea permafrost: summary of discussion and research needs. 1986, p.48-49, eng 41-2513
- Eso's ice island shows how Arctic life goes on. Cottrill, A., 1987, p.42-48, eng 41-2526
- Alaska: potential for giant fields. Hohler, J.J., et al, 1986, p.131-142, eng 41-2607
- Oil and gas fields in the East Coast and Arctic basins of Canada. Meneley, R.A., 1986, p.143-176, eng 41-2608
- U.S.-Canadian cooperation in the Arctic. Friedheim, R.L., 1986, p.360-367, eng 41-2692
- Canadian Beaufort: a corrosive extreme. Lingnau, D.G., 1986, p.45-51, eng 41-2740
- Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program. Hodgins, D.O., et al, 1986, 195p., eng 41-3030
- Ice-gauge studies, Alaskan Beaufort Sea. Barnes, P.W., et al, 1986, p.41-50, eng 41-3090
- Ice scouring in the Canadian Beaufort Sea. McGonigal, D., et al, 1986, p.51-59, eng 41-3091
- Beaufort Sea ice scour extreme depth and age. Shearer, J., et al, 1986, p.167-169, eng 41-3107
- Preliminary simulation of the formation and infilling of sea ice gouges. Weeks, W.F., et al, 1986, p.259-268, eng 41-3118
- Towards repetitive mapping of ice scours in the Beaufort Sea. Shearer, J., et al, 1986, p.284-286, eng 41-3120
- Geotechnical design for an Arctic mobile offshore drilling unit. Hewitt, K.J., et al, 1986, p.956-979, eng 41-3170
- Analysis of NavSat buoy data from Beaufort Sea, 1980—primary results. 1981, 136p., eng 41-3381
- Beaufort Sea coastal currents: a divergence near Barter Island, Alaska? Barnes, P.W., et al, 1987, p.139-142, eng 41-3468
- Ice scour mosaic comparison study. 1980. Shearer, J., 1980, 17p. + figs, eng 41-3474
- Analysis of NavSat buoy data from Beaufort Sea, 1980—detailed results. 1981, 236p., eng 41-3475
- Analysis of NavSat buoy data, Beaufort Sea, 1980—271 fixes (part B). 1981, 173p., eng 41-3477
- Analysis of NavSat buoy data, Beaufort Sea, 1980—measurement variances. 1981, 31p., eng 41-3478
- Natural shoal rubble pile study, Beaufort Sea, March-April 1979. McGonigal, D., et al, 1986, 36p. + figs., appenda., eng 41-3540
- Rubble field study, Issungnak, 1979-80. Vol.1. Executive summary report. McGonigal, D., 1983, 38p., eng 41-3549
- Pack ice/rubble field interaction study, Issungnak 1980. 1981, 88p. + appenda., eng 41-3550
- Ice conditions around Issungnak, 1979-80. Data report. Shinde, S.B., 1981, 58p. + figs., appenda., eng 41-3551
- Issungnak rubble pile—field installation of ice stress panels—interim report. Vaudrey, K.D., 1980, 13p. + appenda., eng 41-3552
- Ice stress panel results, Issungnak 1980. McGonigal, D., 1981, 14p. + figs., eng 41-3553
- Cone penetration tests of the sediments off Richards I., N.W.T. Kurfurst, P.J., 1987, p.939-944, eng 41-4018
- Sea ice features using side-looking radar and Landsat imagery. Barnes, J.C., et al, 1981, 66p., eng 41-4158
- Beaufort-Chukchi ice margin data from Seasat: ice motion. Carsey, F., et al, 1987, p.7163-7172, eng 41-4268
- Arctic dredge spread. Machemehl, J.L., 1987, p.125-130, eng 41-4633
- Bibliography of hydrocarbon development in the Yukon region, Canada. Cameron, N.P., comp, 1986, 536p., eng 41-4639
- Bench marks**
- Methods of studying solifluction in Franz Josef Land. Zhigarev, L.A., et al, 1986, p.120-129, rus 41-1200
- Regionalization of the Yakut ASSR for determining depths of placing geodetic markers. Bogdanov, B.G., 1986, p.30-31, rus 41-3213
- Benthos**
- All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. 1986, 268p., rus 41-2384
- Bering Sea**
- Remote sensing of the Bering Sea ice cover. Cavalieri, D.J., et al, 1986, p.368-377, eng 41-833
- Microwave observations of sea ice in the Bering and Greenland Seas. Grenfell, T.C., 1986, p.378-382, eng 41-834
- United States offshore developments in the Bering and Beaufort Seas. Kelly, P.L., 1986, p.124-148, eng 41-2269
- Alaska: potential for giant fields. Hohler, J.J., et al, 1986, p.131-142, eng 41-2607
- Comments on a heat balance for the Bering Sea ice edge. Kantha, L.H., 1986, p.2205-2208, eng 41-2843
- Sea ice features using side-looking radar and Landsat imagery. Barnes, J.C., et al, 1981, 66p., eng 41-4158
- Northward flow in the Bering and Chukchi seas. Overland, J.E., et al, 1987, p.7097-7105, eng 41-4264
- Spring blooming in Bering Sea during the ice edge retreat, 1980. Maynard, N.G., et al, 1987, p.7127-7139, eng 41-4266
- On the relationship between atmospheric circulation and the fluctuations in the sea ice extents of the Bering and Okhotsk seas. Cavalieri, D.J., et al, 1987, p.7141-7162, eng 41-4267
- Bering Strait**
- Sea ice and the Fairway Rock icefoot. Kovacs, A., et al, 1985, p.25-32, eng 41-337
- Forecasting sea ice movement through Bering Strait. Kozo, T.L., et al, 1987, p.193-207, eng 41-3079
- Northward flow in the Bering and Chukchi seas. Overland, J.E., et al, 1987, p.7097-7105, eng 41-4264
- Sea ice drift near Bering Strait during 1982. Pease, C.H., et al, 1987, p.7107-7126, eng 41-4265
- Bibliographies**
- Icebergs: a bibliography relevant to eastern Canadian waters. Howard, L.M., ed, 1986, 277p., eng 41-271
- Catalog of microfiche of Alaska natural resources and environment. 1986, 167p., eng 41-965
- Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al, 1986, p.199-228, rus 41-1668
- Service life of cellular concrete products. Silaenkov, E.S., 1986, 175p., rus 41-1683
- Introduction of aconites into the Subarctic. Gorelova, A.P., 1986, 116p., rus 41-1927
- Calculating frost resistance of structural elements. Kuz'min, V.R., 1986, 145p., rus 41-1985
- Snow as construction material (bibliographic review of Russian and foreign publications). Kvon, I.A.D., 1986, p.95-105, rus 41-2162
- Bibliography on ground water in glacial-aquifer systems, U.S.A. Wiltshire, D.A., et al, 1986, 26p., eng 41-2464
- Bibliography of icebreakers and ice breaking. 1984, 129p., eng 41-3230
- Bibliography of hydrocarbon development in the Yukon region, Canada. Cameron, N.P., comp, 1986, 536p., eng 41-4639
- Bioenvironments**
- See: Ecology; Ecosystems
- Biogeography**
- Biogeographic evolution of a moraine sector in Svalbard. Brossard, T., 1985, p.33-46, frej 41-371
- Biology**
- See: Cryobiology; Marine biology; Microbiology
- Biomass**
- Phytoplankton and ecologic peculiarities of forest types prevailing in different landscapes of central taiga. Shelekhov, A.M., et al, 1985, p.38-45, rus 41-192
- Seasonal variation of chlorophyll-a in fast ice near Davis Station. Lu, P., 1986, p.11-19, chj 41-397
- Primary production of inshore water near Davis Station. Lu, P., et al, 1986, p.38-43, chj 41-398
- Biomass of Alpine tundra of Putorana Plateau. Deeva, N.M., 1986, p.789-794, rus 41-1003
- Effect of fertilizer on production of tussock tundra, Alaska. Shaver, G.R., et al, 1986, p.261-268, eng 41-1175
- Antarctic stream ecosystems: variability in environmental properties and algal community structure. Howard-Williams, C., et al, 1986, p.511-544, eng 41-1558
- Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., 1986, p.49-67, rus 41-1822
- Benthos in the experimental bays of the Ob' River below Novosibirsk. Blagovidova, L.A., et al, 1985, p.66-72, rus 41-1832
- Life and living conditions of the Barents Sea benthos. Matishov, G.G., ed, 1986, 220p., rus 41-1901
- Seasonal growth and biomass in hummocks of Alaskan tussock tundra. Shaver, G.R., et al, 1986, p.257-278, eng 41-2190
- Peculiarities of ecosystems distribution in the Barents Sea. Golikov, A.N., et al, 1986, p.7-8, rus 41-2386
- Bacterial plankton in the ecosystems of pelagic zones of the Barents and White seas. Teplinskaja, N.G., 1986, p.18-20, rus 41-2388
- Analysis of endemic species of moss flora in Central Asia. Mamatkulov, U.K., 1986, p.39-49, rus 41-2777
- Ecology of sea ice microbial communities of McMurdo Sound. Kottmeier, S.T., et al, 1985, p.128-130, eng 41-2956
- Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover. McGrath Gossell, S., et al, 1987, p.153-164, eng 41-3131
- Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microalgal communities. Palmisano, A.C., et al, 1987, p.165-173, eng 41-3132
- Bacterial production in annual sea ice in McMurdo Sound. Kottmeier, S.T., et al, 1987, p.175-186, eng 41-3133
- Hydrothermal regime of taiga and tundra soils of northeastern Europe. Kononenko, A.V., 1986, 145p. + inserts, rus 41-3246
- Phytoplankton in the marginal ice zone of the Greenland Sea during summer, 1984. Spies, A., 1987, p.195-205, eng 41-3684
- Phytoplankton in marine sediments of Frobiisher Bay. Hsiao, S.I.C., 1987, p.245-251, eng 41-3685
- Forest-tundra and north taiga forests of the Far East. Raevskikh, V.M., et al, 1986, p.18-20, rus 41-3744
- Biologic activity of forest soils. Korsunov, V.M., ed, 1985, 122p., rus 41-4109
- Microflora in forest soils of the Lower Angara depression. Vishniakova, Z.V., et al, 1985, p.88-101, rus 41-4112
- Biomass in the marginal ice zone of the Fram Strait, summer 1984. Smith, W.O., Jr., et al, 1987, p.677-678, eng 41-4237
- Spring blooming in Bering Sea during the ice edge retreat, 1980. Maynard, N.G., et al, 1987, p.7127-7139, eng 41-4266
- Density nutrients and phytoplankton in the ice edge zone of the Weddell-Scotia Sea. Nelson, D.M., et al, 1987, p.7181-7190, eng 41-4270
- Environmental impact of industrial undertakings. Krivolutskii, D.A., ed, 1987, 320p., rus 41-4567
- Bioindications of natural environments in the North. Kriuchkov, V.V., 1987, p.60-67, rus 41-4568
- Influence of industrial wastes on vegetation of northern forest ecosystems. Egorova, V.N., et al, 1987, p.143-147, rus 41-4570
- Biota**
- See: Ecology
- Bitumens**
- Stabilization of fine-grained soil for road and airfield construction. Danyluk, L.S., 1986, 37p., eng 41-540
- Polyethylene-modified bitumen for paving applications. Jew, P., et al, 1986, p.2685-2704, eng 41-829

- Thermal expansion of asphalt pavement at low temperature. Osterkamp, T.E., et al, [1986, p.299-301, eng] 41-1298
- Asphalt overlay on the Granville bridge. Koubeky, P., [1986, p.132-139, eng] 41-2203
- Performance of bituminous surface treatments in northern Canada. MacLeod, D.R., et al, [1986, p.206-228, eng] 41-2205
- Physical properties of asphalt cements used in Quebec from 1979 to 1986. Boudreault, J., [1986, p.302-319, eng] 41-2206
- Performance of bituminous surface treatments in Alaska. Final report. Connor, B., [1981, 61p., eng] 41-3046
- Evaluation of stripping problems in Oregon. Takallou, H., et al, [1985, p.22-48, eng] 41-3333
- Use of high float emulsion asphalt in Alaska (Report to the Legislature). Connor, B., [1985, c12p., eng] 41-4001
- Investigation on the straight asphalt properties of Japan. Iijima, T., et al, [1987, p.1-36, eng] 41-4020
- Selection of paving asphalt cements for low temperature service. Robertson, W.D., [1987, p.41-82, eng] 41-4021
- Paving asphalt temperature susceptibility. McLeod, N.W., [1987, p.147-240, eng] 41-4024
- Temperature distributions in asphalt pavements. Himeno, K., et al, [1987, p.241-275, eng] 41-4025
- Pavement structure subjected to low temperature. Selvadurai, A.P.S., et al, [1987, p.277-301, eng] 41-4026
- Bearing capacity of asphalt pavement at low temperature. Kasahara, A., et al, [1987, p.367-396, eng] 41-4029
- Results of laboratory tests on AMIR compacted asphalt slabs. El Halim, A.O., et al, [1987, p.417-451, eng] 41-4031
- Crack growth through asphalt overlays due to thermal stresses. Joseph, P., et al, [1987, p.453-491, eng] 41-4032
- Investigation of preparation for thermal cracking in asphalt pavements. Kubo, H., et al, [1987, p.493-510, eng] 41-4033
- Factor analyses of damage modes of asphalt pavements. Fukuda, T., et al, [1987, p.511-523, eng] 41-4034
- Adhesive layer for overlay with thin concrete blocks. Inuzuka, M., et al, [1987, p.525-540, eng] 41-4035
- Use of rubber-modified asphalt pavements in cold regions. Takallou, H.B., et al, [1987, p.541-574, eng] 41-4036
- Asphalt pavement durability improved by surface treatment. Anzaki, Y., et al, [1987, p.619-636, eng] 41-4038
- Consequences of deferred maintenance on transverse cracks. Chong, G.J., [1987, p.637-686, eng] 41-4039
- Bituminous surface treatments in northern Canada. MacLeod, D.R., et al, [1987, p.735-772, eng] 41-4042
- Present situation and evaluation of *in-situ* surface and base recycling. Tada, H., et al, [1987, p.773-811, eng] 41-4043
- Characterization of recycled asphalt mixtures and their pavement performance. Yamada, M., [1987, p.813-828, eng] 41-4044
- Performance of high ratio recycled pavements in northern Ontario. McLuckie, R.F., et al, [1987, p.829-865, eng] 41-4045
- Recycling of pavement *in-situ* in Japan. Kohno, H., et al, [1987, p.867-892, eng] 41-4046
- In-place surface recycling on expressways. Tsuchiya, K., et al, [1987, p.893-915, eng] 41-4047
- Application of geotextiles in Alaska. Johnson, E.G., [1983, 64p., eng] 41-4071
- Bituminous concretes**
- Effect of asphalt concrete overlays on cracking in cement concrete. Janassen, D.J., [1985, 186p., eng] 41-986
- Low-temperature mechanical properties of asphalt concrete. Kallas, B.F., [1982, 53p., eng] 41-2136
- Conference of the Canadian Technical Asphalt Association, 31st, 1986. [1986, 339p. + append., eng] 41-2201
- Factors affecting the cracking of asphalt concrete pavements. Ruth, B.E., et al, [1986, p.96-109, eng] 41-2202
- Development of a method to evaluate the low temperature tensile properties of asphalt concrete. Anderson, K.O., et al, [1986, p.156-189, eng] 41-2204
- Resilient moduli of soil specimens in the frozen and thawed states. Johnson, T.C., et al, [1986, 62p., eng] 41-2613
- Evaluation and prevention of water damage to asphalt pavement materials. [1985, 154p., eng] 41-3332
- Changes in asphalt concrete durability due to freeze thaw cycles. Gilmore, D.W., et al, [1985, p.73-88, eng] 41-3334
- Moisture damage to various foamed asphalt mixtures. Castedo, H., et al, [1985, p.104-115, eng] 41-3335
- Prevention of water damage in asphalt mixtures. Kennedy, T.W., [1985, p.119-133, eng] 41-3336
- Changes in properties of asphalt concretes due to aging. Sato, K., et al, [1987, p.85-116, eng] 41-4022
- Initial cooling of hot-mix asphalt concrete mats. White, S., et al, [1987, p.117-146, eng] 41-4023
- Tensile properties of asphalt concrete at freezing temperature. Anderson, K.O., et al, [1987, p.333-366, eng] 41-4028
- Low temperature cracking susceptibility of asphalt concrete. Janoo, V.C., et al, [1987, p.397-415, eng] 41-4030
- Summary of proper cold weather pavement repair methods. Eaton, R.A., [1987, p.1013-1027, eng] 41-4051
- Blasting**
- Blasting frozen ground in proximity of buildings and power plants. Toropov, V.V., [1986, p.42-44, rus] 41-512
- Underground storage of petroleum products in the Far North. Braiko, V.N., et al, [1983, p.107-109, rus] 41-520
- Soil stabilization by wetting and detonation. Takhirov, I.G., et al, [1986, p.16-19, rus] 41-880
- Strength and filtration properties of water-saturated peats in a detonation zone. Smirnov, A.G., et al, [1986, p.115-118, rus] 41-906
- Blasting-mechanical method of excavating frozen ground. Rzhetskii, V.A., et al, [1986, p.16-18, rus] 41-1526
- Frost penetration effect on blasting parameters of seasonally freezing ground. Frash, G.B., et al, [1986, p.55-59, rus] 41-2142
- Using artificial snow for dust control during mass-detonations in mines. Bitkolov, N.Z., et al, [1986, p.197-200, rus] 41-2178
- Blasting work in ground and rocks. Kucheriavii, F.I., ed, [1986, 128p., rus] 41-2903
- Using the blow-out method in open mining of placer deposits. Poplavskii, V.A., [1986, p.48-54, rus] 41-2904
- Peat excavation by blasting in channel construction. Frash, G.B., [1986, p.54-61, rus] 41-2905
- On the least resistance line of curvilinear blow-out charges detonated in permafrost. Afanas'ev, E.M., et al, [1986, p.61-66, rus] 41-2906
- Using lesser diameter charges in blasting frozen placer deposits. Shchegolev, S.V., [1986, p.81-85, rus] 41-2907
- Physico-chemical processes of mining. Mathematical models of leaching ores and thawing frozen rocks. Ignatov, A.A., [1986, 97p., rus] 41-3015
- Reciprocal influence of underground and open mining under permafrost conditions. Los', I.N., [1986, p.33-37, rus] 41-4553
- Slit- and borehole charges for permafrost excavation. Ilurko, A.A., [1987, p.18-19, rus] 41-4625
- See also: Explosion effects; Ice blasting
- Blowing snow**
- Snowdrifting: a review of modelling methods. Kind, R.J., [1986, p.217-228, eng] 41-1290
- Focus on snow and ice control. [1986, p.30-31, eng] 41-2310
- Continuum mixture theory with application to turbulent snow. Decker, R.A., [1986, 110p., eng] 41-2641
- Impact of snowflakes on car windshields. King, W.D., et al, [1987, p.149-154, eng] 41-2762
- Snow distribution patterns in the alpine krummholz zone. Daly, C., [1984, p.157-175, eng] 41-3139
- Surface sampling of a snowmelt by a 2D-C probe with and without aspiration. Holroyd, E.W., III, [1986, p.755-758, eng] 41-4544
- Experimental study on the initiation of blowing snow. Kobayashi, S., et al, [1985, p.195-200, jpn] 41-4588
- Boats**
- See: Ships
- Bogs**
- See: Swamps
- Booms (equipment)**
- See: Ice booms
- Borehole instruments**
- Development of an ice core drill for liquid-filled holes. Suzuki, Y., et al, [1986, p.86-92, eng] 41-3662
- Boreholes**
- Blasting frozen ground in proximity of buildings and power plants. Toropov, V.V., [1986, p.42-44, rus] 41-512
- Strain rate measurements on a firm pit, Austria. Eisner, H., et al, [1984, p.169-176, eng] 41-633
- Measurements of deformation in a firm pit. Ambach, W., et al, [1985, p.211-222, ger] 41-717
- Borehole deformation experiments, Barnes Ice Cap, Canada. Hooke, R.L., et al, [1986, p.261-276, eng] 41-1293
- Ice borehole as sampler for isotopic dating. Zemtsov, A.A., et al, [1984, p.72-78, rus] 41-2355
- Dynamics of ice-rock barriers under conditions of freezing of filtering rocks. Chugunov, V.A., et al, [1987, p.981-986, eng] 41-3242
- Extrusion flow demonstrated by borehole deformation measurements over a riegel, Storglaciären, Sweden. Hooke, R.L., et al, [1987, p.72-78, eng] 41-3599
- Guide to soil stabilization by injection. [1986, 129p., rus] 41-3608
- Preparation of geophysical borehole site with ground ice, Fairbanks, AK. Delaney, A.J., [1987, 15p., eng] 41-3627
- Thickness of the Ronne Ice Shelf. Engelhardt, H., et al, [1987, p.318-319, eng] 41-3640
- Borehole closure at Mizuho Station. Kawada, K., et al, [1986, p.66-73, eng] 41-3659
- Geologic materials from boreholes for the TACTP, Copper River, Alaska. Odum, J.K., et al, [1986, 18p., eng] 41-4106
- Reciprocal influence of underground and open mining under permafrost conditions. Los', I.N., [1986, p.33-37, rus] 41-4553
- Methodical and experimental bases of geothermy. Kropotkin, P.N., ed, [1983, 230p. (Pertinent p.79-84, 181-187), rus] 41-4614
- Using fire-jet drills in permafrost. Sherstiuk, B.F., et al, [1986, p.8-10, rus] 41-4615
- Boring**
- See: Drilling
- Botany**
- See: Geobotanical interpretation; Paleobotany; Plants (botany); Vegetation
- Bothnia, Gulf**
- Sea ice ridges in the Gulf of Bothnia. Zakrzewski, W.P., [1986, p.131-144, eng] 41-3759
- Bottom friction**
- See: Basal sliding
- Bottom ice**
- Radio-echo investigations of Ronne Ice Shelf. Crabtree, R.D., et al, [1986, p.37-41, eng] 41-735
- Final report on freezeup studies, RU 205. [1986, var.p., eng] 41-1208
- Anchor ice and bottom-freezing in marine sedimentary environments. Reimnitz, E., et al, [1986, 21p., eng] 41-1209
- Flume studies and field observations of the interaction of frazil ice and anchor ice with sediment. Kempema, E.W., et al, [1986, 48p., eng] 41-1210
- Bottom sediment**
- Nearshore sediments of eastern Baffin Island. Emory-Moore, M., [1986, 55p., eng] 41-245
- Evaluation of sea bottom ice scour models. Comfort, G., et al, [1986, 71p. + graphs., eng] 41-273
- Petroleum residues in the Canadian Arctic marine environment. Levy, E.M., [1986, p.161-169, eng] 41-352
- Melting history of Antarctica during the past 60,000 years. Labeyrie, L.D., et al, [1986, p.701-706, eng] 41-616
- Underground ice in permafrost. Gell, W.A., [1976, 260p., eng] 41-1764
- Benthonic foraminifera from Baffin I. fiord environments. Schafer, C.T., et al, [1986, p.232-239, eng] 41-1867
- Life and living conditions of the Barents Sea benthos. Matishov, G.G., ed, [1986, 220p., rus] 41-1901
- Quantitative study of slope instability in the Gulf of Alaska. Hampton, M.A., et al, [1978, p.2307-2318, eng] 41-2127
- Ice island lab shows petroleum potential. Jackson, R., [1986, p.1-4, eng] 41-2198
- Seafloor morphology and sediments. Pelletier, B.R., [1986, p.143-162, eng] 41-2595
- Circum-Arctic petroleum potential. Green, A.R., et al, [1986, p.101-130, eng] 41-2606
- Alaska: potential for giant fields. Hohler, J.J., et al, [1986, p.131-142, eng] 41-2607
- Oil and gas fields in the East Coast and Arctic basins of Canada. Meneley, R.A., [1986, p.143-176, eng] 41-2608
- Organic soils. Rubinshtein, A.I.A., [1986, 89p., rus] 41-2729
- Regularities governing the salinity of frozen marine deposits. Dubikov, G.I., [1986, p.14-27, rus] 41-2815
- Seismic cone penetration testing, offshore of the Mackenzie Delta. Campanella, R.G., et al, [1987, p.154-159, eng] 41-2979
- Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program. Hodgins, D.O., et al, [1986, 195p., eng] 41-3030
- Engineering aspects of ice gouging. Bea, R.G., [1986, p.18-28, eng] 41-3088
- Ice-gouge studies, Alaskan Beaufort Sea. Barnes, P.W., et al, [1986, p.41-50, eng] 41-3090
- Deformation by ice of sediment remanent magnetism. Day, T., [1986, p.78-81, eng] 41-3095
- Regional geology and seabed dynamics at the proposed iceberg scour (DIGS) experiment site. Josenhans, H.W., [1986, p.132-137, eng] 41-3102
- Estimating ice-scour frequency and risk to buried pipelines. Pilkington, R., [1986, p.213-220, eng] 41-3113
- Marine processes. Baker, J.M., et al, [1987, p.50-74, eng] 41-3233
- Changes in geocryological conditions of water-reservoir basins. Onikienko, T.S., [1986, p.83-88, rus] 41-3450
- Cone penetration tests of the sediments off Richards I., N.W.T. Kurfurst, P.J., [1987, p.939-944, eng] 41-4018
- Seafloor stability study, inner Scotian Shelf. Judge, J.T., et al, [1987, 80p., eng] 41-4531
- Bottom topography**
- Pal'gov-Shumskii method of calculating bottom relief of glacier beds. Bulnitskii, A.B., et al, [1986, p.195-201, rus] 41-134
- Antarctic ice sheet topography and surface-bedrock relationships. McIntyre, N.F., [1986, p.124-128, eng] 41-753



**Bottom topography (cont.)**

- Controlling factors of ice-created sea floor features. Clark, J.L., et al, [1986, p.565-582, eng] 41-1118
- Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., [1986, 224p., rus] 41-1748
- Life and living conditions of the Barents Sea benthos. Matiahev, G.G., ed, [1986, 220p., rus] 41-1901
- Bed topography from radio echo soundings of Columbia Glacier, Alaska. Brown, C.S., et al, [1986, 26p., eng] 41-2119
- Beaufort Sea atlas. Mungall, C., [1986, p.10-11, eng] 41-2199
- Self-organization of glacial relief. Mazo, V.L., [1986, p.309-312, rus] 41-2305
- Bottom topography effect on ice flow, barotropic flow and baroclinic flow. Håkkinen, S., [1987, p.3807-3820, eng] 41-3062
- Ice scour and seabed engineering. [1986, 322p., eng] 41-3086
- Relict ice scours on King William Island, N.W.T. Woodworth-Lynas, C.M.T., et al, [1986, p.64-72, eng] 41-3093
- Glacial pits: description and postulated origin. Barrie, J.V., et al, [1986, p.73-77, eng] 41-3094
- Iceberg scouring and its effect on seabed, Norwegian shelf. Lien, R., [1986, p.87-96, eng] 41-3096
- Review of deterministic ice-scour models. Comfort, G., et al, [1986, p.97-108, eng] 41-3097
- Iceberg crater chains and scour up- and down-slope. Bass, D., et al, [1986, p.122-128, eng] 41-3100
- Beaufort Sea ice scour extreme depth and age. Shearer, J., et al, [1986, p.167-169, eng] 41-3107
- Iceberg scour distribution, Baffin Island, Canada. King, E.L., et al, [1986, p.172-181, eng] 41-3108
- Populations of iceberg scour depths. Gaskill, H., [1986, p.249-258, eng] 41-3117
- Towards repetitive mapping of ice scours in the Beaufort Sea. Shearer, J., et al, [1986, p.284-286, eng] 41-3120
- Beaufort Sea coastal currents: a divergence near Barter Island, Alaska? Barnes, P.W., et al, [1987, p.139-142, eng] 41-3468
- Ice scour mosaic comparison study, 1980. Shearer, J., [1980, 17p. + figs., eng] 41-3474
- Shelf: the relief, sediments and their formation. Ionin, A.S., et al, [1987, 205p. (Pertinent p.53-80), rus] 41-3688
- Iceberg scouring rate studies, Grand Banks of Newfoundland. Lewis, C.F.M., et al, [1987, p.825-833, eng] 41-4013
- Iceberg scouring off SE Baffin Island. Praeg, D., et al, [1987, p.847-857, eng] 41-4014
- Flow and thickness of Riiser-Larsenisen, Antarctica. Orheim, O., et al, [1986, p.5-22, eng] 41-4093
- Newly formed ice gouges in Harrison Bay, Alaska. Rearic, D.M., [1986, 52p., eng] 41-4107
- JARE reports bottom topography and ice cores, Queen Maud Land. Yoshida, M., et al, [1987, p.221-224, eng] 41-4463
- See also: Ocean bottom
- Boulders**
- See: Rocks
- Bound water**
- See: Hygroscopic water
- Boundary layer**
- Reports of US/USSR Weddell Polynya Expedition, Vol.8. Ackley, S.F., ed, [1986, 158p., eng] 41-460
- Heat conduction phase change problems. Albert, M.R., et al, [1986, p.591-607, eng] 41-607
- Turbulence effect on heat and mass transfer in boundary layers. Zaitsev, S.A., et al, [1985, p.1-8, eng] 41-1005
- Atmospheric boundary layer modification in the marginal ice zone. Bennett, T.J., Jr., et al, [1986, p.13,033-13,044, eng] 41-1861
- Modeling high-velocity winds and low air temperature over seas. Koshinskii, S.D., et al, [1986, p.90-107, rus] 41-1972
- Observations of grain boundary sliding in ice bicrystals. Graves, J.H., [1986, c12p., eng] 41-2133
- Ice-seawater turbulent boundary layer interaction with melting or freezing. Mellor, G.L., et al, [1986, p.1829-1846, eng] 41-2219
- On the width and motion of a rain/snow boundary. Stewart, R.E., et al, [1987, p.343-350, eng] 41-2651
- 45 m mast for boundary layer meteorological research, Ekström Ice Shelf. Belitz, H.-J., et al, [1987, p.5-10, eng] 41-2844
- Atmospheric boundary layer. McBean, G., [1986, p.283-337, eng] 41-2989
- Planetary boundary layer in the marginal ice zone. Brown, R.A., [1986, p.65-78, eng] 41-3060
- Air-ice-ocean coupled model for the formation of leads or polynyas. Chu, P.C., [1986, p.79-88, eng] 41-3061
- Boundary layer measurements and sand transport prediction, Scotian shelf. Hodgins, D.O., et al, [1986, 114p. + append., eng] 41-3189
- Turbulent transfer in a stratified oceanic boundary layer. McPhee, M.G., [1987, p.6977-6986, eng] 41-4254
- See also: Interfacial; Turbulent boundary layer

**Boundary value problems**

- Thermocapillary free boundaries in crystal growth. Cuvelier, C., et al, [1986, p.1-26, eng] 41-826
- Moving boundary problem. Benard, C., et al, [1986, p.1669-1681, eng] 41-2065
- Bouvet Island**
- Botany of Bouvet Island. [1986, 79p., eng] 41-915
- General outline of the botanical investigations on Bouvetöya. Engelskjön, T., [1986, p.5-9, eng] 41-916
- Bryophytes on Bouvetöya. Bell, B.G., et al, [1986, p.11-22, eng] 41-917
- Macrolichens of Bouvetöya. Jørgensen, P.M., [1986, p.23-34, eng] 41-918
- Crustose lichens of Bouvetöya. Øvstedal, D.O., [1986, p.35-56, eng] 41-919
- Lichenicolous ascomycetes from Bouvetöya. Øvstedal, D.O., et al, [1986, p.57-60, eng] 41-920
- Lamprospora miniopsis* Spooner, a bryophilous discomycete from Bouvetöya. Schumacher, T., [1986, p.61-64, eng] 41-921
- Algal vegetation of Bouvet Island. Klaveness, D., et al, [1986, p.65-69, eng] 41-922
- Phytogeographical relations of the cryptogamic flora of Bouvetöya. Engelskjön, T., et al, [1986, p.71-79, eng] 41-923
- Use of AWS on Bouvet Island. Vinje, T., [1986, p.21-22, eng] 41-1076
- Brakes (motion arresters)**
- Antilock brake systems in winter driving, Sweden and Norway. Nordström, O., [1986, 46p. + append., swe] 41-572
- Passenger car tests of antilock systems under winter conditions. Nordström, O., [1986, 37p. + append., swe] 41-2218
- Breakup**
- See: Ice breakup
- Bricks**
- Estimating the performance of low-loaded structures in the BAM zone. Sobin, G.P., [1985, p.28-30, rus] 41-288
- Construction of low-rise buildings on seasonally freezing gravelly grounds. Polishchuk, A.I., et al, [1985, p.30-32, rus] 41-289
- Winter weather records relating to potential frost failure of brickwork. Beardmore, C., et al, [1987, p.7-8, eng] 41-3801
- Bridges**
- Ice forces on bridge piers. Haynes, F.D., [1986, p.83-101, eng] 41-645
- Canyon Creek bridge. Carlson, L., et al, [1986, p.43-47, eng] 41-827
- State of corrugated metal culverts during operation. Roisk, G.S., et al, [1986, p.12-13, rus] 41-1531
- Bridge construction under severe climatic conditions. Veinblat, B.M., et al, [1986, p.9-11, rus] 41-1887
- Increasing frost resistance of steel bridges. Bol'shakov, K.P., [1986, p.12-14, rus] 41-1888
- Asphalt overlay on the Granville bridge. Koubsky, P., [1986, p.132-139, eng] 41-2203
- Temperature distribution in composite bridges. Kennedy, J.B., et al, [1987, p.475-482, eng] 41-2485
- Bridge piers without grilles under complicated natural conditions. Kudriashov, V.I., et al, [1987, p.16-17, rus] 41-2793
- Construction of deep foundations. Glotov, N.M., et al, [1985, 248p., rus] 41-3125
- Ice detection systems—experimental feature. Final report. Petrak, A., et al, [1986, 11p. + append., eng] 41-3510
- Concrete durability in bridges. Hawkins, M., [1987, p.397-421, eng] 41-3698
- Durability of concrete bridges in cold climates—balance of the systematic inspection. Van Begin, C., [1987, p.541-554, eng] 41-3700
- Durability of high-strength concrete containing a high range water reducer. Robson, G., [1987, p.765-780, eng] 41-3705
- Deterioration of concrete used in road bridges due to freezing and thawing. Fujiwara, T., [1987, p.805-818, eng] 41-3707
- Corrosion protection of the concrete bridges of bridges. Manning, D., [1987, p.1527-1547, eng] 41-3732
- Studying the effect of ground conditions on strength and stability of no-pilework bridge supports exposed to moving ice. Zhordochko, I.O., et al, [1987, p.101-104, rus] 41-3792
- Heat pipes to avoid freezing of highway bridge decks. Ferrara, A.A., et al, [1977, 5p., eng] 41-4604
- See also: Ice crossings; Pontoon bridges; River crossings
- Brightness**
- Classifying ice ice with microwave imagery. Eppler, D.T., et al, [1986, p.10,661-10,695, eng] 41-1008
- Snow melt and surface albedo in the Arctic Basin. Robinson, D.A., et al, [1986, p.945-948, eng] 41-1215
- Nimbus 7 SMMR investigations of snowpack properties in the northern Great Plains for the winter of 1978-79. McFarland, M.J., et al, [1987, p.35-46, eng] 41-3314
- Brines**
- Effect of brine on sea ice heat conductivity. Nazintsev, I.U.L., [1986, p.107-115, rus] 41-1266

- Relationship between salt weathering debris production and temperature. Davison, A.P., [1986, p.335-341, eng] 41-1778
- Problems of engineering glaciology. Alekseev, V.R., ed, [1986, 223p., rus] 41-2145
- Experiments with desalting brines. Sosnovskii, A.V., et al, [1986, p.208-214, rus] 41-2180
- Different domains of application of cold. Manual. Bykov, A.V., ed, [1985, 271p. (Pertinent p. 42-66, 99-125, 222-260), rus] 41-3154
- Isotopic composition and origin of lacustrine brines in the Arctic. Page, P., et al, [1987, p.210-216, eng] 41-4078
- Cooling of a salt solution. Entov, V.M., et al, [1987, p.1344-1347, eng] 41-4164
- Formation processes of brine drainage channels in sea ice. Wakatsuchi, M., et al, [1987, p.7195-7197, eng] 41-4272
- Brittleness**
- Avoiding low temperature brittle failures of oil storage tanks. Fraylick, J.R., [1986, p.125-130, eng] 41-78
- Brittleness of reinforced concrete structures under arctic conditions. Kivikkas, L., et al, [1986, 20p., eng] 41-213
- Elastoplastic deformation of steel at low temperatures. Zhigalkin, V.M., et al, [1986, p.129-141, rus] 41-1017
- Scale effect in ice. Gershunov, E.M., [1986, p.277-284, eng] 41-1294
- Modelling the mechanical properties of ice. Szyzskowski, W., [1987, p.159-165, eng] 41-2417
- Compressive strength of ice with bimodal distribution of grain sizes. Laughlin, J.L., et al, [1987, p.167-172, eng] 41-2418
- Construction of steel reservoirs under northern conditions. Popovskii, B.V., [1985, p.28-34, rus] 41-2848
- Conditions of cold resistance and durability of structural elements in the North. Lyglaev, A.V., [1985, p.83-90, rus] 41-2851
- Electric-arc welding under northern conditions. Lariionov, V.P., [1986, 256p., rus] 41-3511
- Bubbles**
- Effective age of bubbles in polar ice. Enting, I.G., et al, [1985, p.777-790, eng] 41-2111
- Age distribution of air bubbles trapped in polar ice. Enting, I.G., [1986, p.2841-2854, eng] 41-2576
- On the application of lattice statistics to bubble trapping in ice. Enting, I.G., [1987, p.100-113, eng] 41-3195
- Microstructural characteristics of hailstone embryos. Tislov, M.I., et al, [1986, p.229-237, rus] 41-3672
- Grain growth in polar ice: Pts. 1 and 2. Alley, R.B., et al, [1986, p.415-433, eng] 41-4297
- See also: Gas inclusions
- Building**
- See: Construction
- Building codes**
- Designing low-load foundations of rural buildings in Transbaikalia. Makarov, A.P., et al, [1985, p.59-61, rus] 41-305
- Proposed standard specification for cold weather concreting (ACI 306.1). Carino, N.J., et al, [1986, p.1043-1047, eng] 41-2473
- Improving thermotechnical properties of lightweight concretes for external wall panels. Fedorov, V.A., et al, [1987, p.36-37, rus] 41-2794
- Guide to the construction of basins and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968
- Revision of building codes for foundation construction on permafrost. Fedorovich, D.I., et al, [1987, p.144-146, rus] 41-3214
- Guide to soil stabilization by injection. [1986, 129p., rus] 41-3608
- Computation of maximum permafrost temperatures in beds beneath buildings. Kononov, A.A., [1986, p.192-197, eng] 41-4366
- Developing and standardizing methods of determining the structural properties of frozen grounds. Sadovskii, A.V., et al, [1983, p.19-21, rus] 41-4482
- See also: Design criteria
- Building materials**
- See: Construction materials
- Buildings**
- Shallow building foundations on discontinuous permafrost. Fedorov, V.I., et al, [1985, p.15-16, rus] 41-280
- Foundationless low-rise buildings for structurally unstable ground. Abramov, V.E., [1985, p.18-19, rus] 41-282
- Estimating the deformation of low-load structures in the BAM zone. Sobin, G.P., [1985, p.28-30, rus] 41-288
- Construction of low-rise buildings on seasonally freezing gravelly grounds. Polishchuk, A.I., et al, [1985, p.30-32, rus] 41-289
- Protection of shallow foundations from flooding. Kozlova, M.P., [1985, p.43-45, rus] 41-296
- Foundations for low-rise buildings on frost-heaving ground. Zhelezniak, I.I., [1985, p.47, rus] 41-298



- Designing low-load foundations of rural buildings in Transbaikalia. Makarov, A.P., et al, [1985, p.59-61, rus] 41-305
- Development of shysterneve D.M., et al, [1985, p.74-76, rus] 41-311
- Formulas for calculating settlement of seasonally freezing ground. Pyshev, N.F., [1985, p.91-93, rus] 41-320
- Computerized forecasting of cryogenic processes. Sozoniuk, V.V., [1985, p.112, rus] 41-332
- Megastructures for mobilization. Flanders, S.N., [1986, p.10-11, eng] 41-410
- Building construction in cold climates. Minion, R., comp, [1985, 79p., eng] 41-824
- Mathematical modeling of thermal regime of a building in annual cycle, for fuel economy in heating-cooling of premises. Makhalaia, Zh.I., [1986, p.86-89, rus] 41-905
- Theoretical basis for planning northern cities. Panov, L.K., [1986, p.146-154, rus] 41-1206
- All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings, [1985, 12p., rus] 41-1362
- Thermal performance of the exterior envelopes of buildings; Proceedings, [1986, 1422p., eng] 41-1376
- Energy measurements and building parameters. Lyberg, M.D., et al, [1986, p.45-52, eng] 41-1378
- Study of heat loss through basement floors. Richmond, W.R., et al, [1986, p.336-350, eng] 41-1381
- Snow control for sloped glazing—an energy penalty. Schuyler, G.D., et al, [1986, p.443-448, eng] 41-1382
- Heat loss factors for insulated building foundations. Zarling, J.P., et al, [1986, p.465-483, eng] 41-1383
- Thermal performance of rigid cellular foam insulation at subfreezing temperatures. Aldrich, D.F., et al, [1986, p.500-509, eng] 41-1384
- Overall building enclosure evaluation in cold climates. Mill, P.A.D., et al, [1986, p.510-524, eng] 41-1385
- Instrument for measuring building-envelope thermal resistance. Janssen, J.E., et al, [1986, p.723-738, eng] 41-1386
- Reduced energy losses through structural thermal bridges. Tve, R.P., et al, [1986, p.739-750, eng] 41-1387
- Convective roof heat losses in buildings. Harje, D.T., et al, [1986, p.751-760, eng] 41-1388
- Optimal building shape: a general design tool. Turner, R.H., [1986, p.1366-1378, eng] 41-1392
- Decision model for the design of building envelopes. Murthy, N.S., [1986, p.1379-1392, eng] 41-1393
- Frost crack of buildings and its treatment methods in cold regions. Tang, S., [1986, p.275-280, chi] 41-1430
- Building mobile structures on northern BAM sites. Makeev, A.M., et al, [1986, p.21-23, rus] 41-1533
- Serviceability limit states: deflection. Galambos, T.V., et al, [1986, p.67-84, eng] 41-2532
- Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p., rus] 41-2911
- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, [1986, p.36-41, rus] 41-2918
- Improving thermal insulation of building walls. Mordukhovich, I.M., et al, [1986, p.53-60, rus] 41-2920
- Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] 41-2962
- Canadian Building Congress, 4th, 1985. [1985, 381p., eng] 41-3190
- Unforgiving North. Chill, R.W.C., et al, [1985, p.157-164, eng] 41-3191
- Parking garage problem. Litvan, G.G., [1985, p.214-218, eng] 41-3192
- Urban planning and construction problems in Siberia. Krushlinskii, V.I., [1986, p.40-45, rus] 41-3259
- Reference guide for building diagnostics equipment and techniques. McKenna, C., et al, [1986, 148p., eng] 41-3359
- Measuring building R-values with thermography and heat flux sensors. Flanders, S.N., [1987, 29p., eng] 41-4083
- Computation of maximum permafrost temperatures in beds beneath buildings. Kononov, A.A., [1986, p.192-197, eng] 41-4366
- Experience and prospects of using self-contained steam-liquid cooling devices in construction on permafrost. Khristalev, L.N., et al, [1983, p.3-12, rus] 41-4471
- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., [1986, p.122-167, rus] 41-4502
- See also specific types of buildings
- Buoyancy**
- Buoyancy induced flows in cold pure and saline water. Qureshi, Z.H., et al, [1986, p.1383-1392, eng] 41-565
- Observations of internal gravity waves under the Arctic pack ice. Levine, M.D., et al, [1987, p.779-782, eng] 41-2327
- Cables (power lines)**
- See: Power lines; Transmission lines
- Cables (ropes)**
- Excess loss of single-mode jacketed optical fiber at low temperature. Yabuta, T., et al, [1983, p.2356-2362, eng] 41-486
- Fiber optics in adverse environments. Lyons, P.B., ed, [1981, 276p., eng] 41-579
- X ray attenuation at low temperatures in polymer silica fibers. Barnes, C.E., et al, [1981, p.25-34, eng] 41-580
- Response of irradiated optical waveguides at low temperatures. Taylor, E.W., et al, [1981, p.40-50, eng] 41-581
- Cold-induced losses in loose-sheath fiber-optic cables. Holliday, V.M., et al, [1981, p.77-79, eng] 41-582
- Survivability of Army fiber optics systems. Wichansky, H., et al, [1981, p.110-117, eng] 41-583
- Caissons**
- Caisson drilling and completion system. Hewlett, C., [1986, p.459-468, eng] 41-361
- Ice stress measurements in a rubble field surrounding a caisson-retained island. Sayed, M., et al, [1986, p.255-262, eng] 41-1597
- Caisson retained island drilling platform, Beaufort Sea. De Jong, J.J.A., et al, [1978, p.2111-2120, eng] 41-2126
- Caisson wellheads allow for future use of offshore exploration wells. McIntosh, I., et al, [1987, p.81-85, eng] 41-2571
- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968
- Construction of deep foundations. Giotov, N.M., et al, [1985, 248p., rus] 41-3125
- Daring to challenge deep water, thick ice. Kelly, D.F., [1985, p.6-14, eng] 41-3411
- Calorimeters**
- Automatic low-temperature calorimeter. Malyshev, V.M., et al, [1986, p.1456-1459, eng] 41-995
- Calving**
- Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274
- Recent changes in a calving glacier, Austeralalisen, Svartisen, Norway. Theakstone, W.H., et al, [1986, p.303-316, eng] 41-3562
- Coastline changes revealed by satellite imagery. Ferrigno, J.G., et al, [1987, p.577-583, eng] 41-3856
- Recent advance of the Ross Ice Shelf, Antarctica. Jacobs, S.S., et al, [1986, p.464-474, eng] 41-4302
- Canada**
- Iceberg information service of environment Canada. Falkingham, J.C., [1986, p.557-560, eng] 41-166
- Icebergs: a bibliography relevant to eastern Canadian waters. Howland, L.M., ed, [1986, 277p., eng] 41-271
- Air chemistry observations in the Canadian Arctic. Hoff, R.M., et al, [1986, p.97-107, eng] 41-348
- Age of the Arctic. Young, O.R., [1985, p.160-179, eng] 41-526
- Guide to marine transportation information sources in Canada. Joba, J.C., [1985, 308p., eng] 41-562
- Northern Oil and Gas Action Program (NOGAP) bibliography, Volume I. [1986, 51p., eng] 41-696
- Mapping Canada's glaciers. Ommanney, C.S.L., [1986, p.132-134, eng] 41-755
- Offshore development in northern Canada and Alaska. Minion, R., comp, [1985, 83p., eng] 41-823
- Canadian sea ice information system CSIS: an online computer database for sea ice and iceberg data. Whittick, J.A., et al, [1986, p.119-124, eng] 41-969
- Controlling factors of ice-created sea floor features. Clark, J.L., et al, [1986, p.565-582, eng] 41-1118
- Pingo ice of the western Arctic coast, Canada. Mackay, J.R., [1985, p.1452-1464, eng] 41-1238
- Summer 1979: ice climatology of the Canadian Arctic. Dey, B., [1985, p.25-33, eng] 41-1481
- Snow and ice in Inuit place names in the eastern Canadian Arctic. Müller-Wille, L., [1985, p.55-57, eng] 41-1484
- Canada's Arctic marine transportation research programs. Brenckmann, M., [1986, p.1-18, eng] 41-2021
- Safe shipping routes in Canadian Arctic waters. MacPhee, S., et al, [1986, p.820-838, eng] 41-2060
- Merchant ship ice navigation studies in the Canadian Arctic. Perchanok, M.S., et al, [1986, p.859-877, eng] 41-2062
- Karst ground water activity in permafrost of Canada. Ford, D.C., [1984, p.340-350, eng] 41-2118
- Development of Canadian frontier regions. Pallister, A.E., et al, [1986, p.36-63, eng] 41-2265
- Future of sub-arctic and arctic offshore development in Canada. Matheson, J.R., [1986, p.149-159, eng] 41-2270
- Ice data management for support of offshore operations. Terry, B.F., et al, [1986, p.195-222, eng] 41-2275
- Research and development in the Division of Mechanical Engineering, 1985. [1986, 89p., eng] 41-2575
- Canadian inland seas. Martini, I.P., ed, [1986, 494p., eng] 41-2591
- Climate overview of the Canadian inland seas. Maxwell, J.B., [1986, p.79-100, eng] 41-2592
- Ice cover. Markham, W.E., [1986, p.101-116, eng] 41-2593
- Coastal features of Canadian inland seas. Martini, I.P., [1986, p.117-142, eng] 41-2594
- Seafloor morphology and sediments. Pelletier, B.R., [1986, p.143-162, eng] 41-2595
- Oil and gas fields in the East Coast and Arctic basins of Canada. Meneley, R.A., [1986, p.143-176, eng] 41-2608
- Ocean development and management in the Arctic by USA and Canada. Vanderzwaag, D.L., et al, [1986, p.327-337, eng] 41-2724
- Recent advances in ice mechanics in Canada. Sinha, N.K., et al, [1987, p.15-35, eng] 41-2932
- Geotechnical engineering offshore, eastern Canada. Brown, J.D., [1986, p.852-878, eng] 41-3169
- Canadian Building Congress, 4th, 1985. [1985, 381p., eng] 41-3190
- Sensitivity of the arctic environment. French, H.M., [1987, p.154-163, eng] 41-3237
- Ice thickness data, winter 1979-1980. [1987, 43p., eng] 41-3253
- Canada and polar science. Adams, W.P., et al, [1987, 116p., + append., eng] 41-3414
- Climatic atlas. Map series 2—Precipitation. [1986, 2p., + 48p. of maps, eng] 41-4521
- Climatic atlas, including freezing precipitation. [1987, 3p., + 108p. of maps, eng] 41-4522
- Alberta**
- Seasonal variations of nitrogen in soils, Alberta. Malhi, S.S., et al, [1986, p.397-409, eng] 41-1085
- Predicting settlement at a damsite on a tunnel valley deposit in Alberta. McClung, J.E., et al, [1987, p.45-57, eng] 41-2978
- Numerical simulation of an Alberta hailstorm. Yau, H.K., et al, [1984, p.585-588, eng] 41-4407
- Alberta—Banff National Park**
- Use of lacustrine sedimentary sequences as indicators of Holocene glacial history, Banff National Park, Alberta, Canada. Leonard, E.M., [1986, p.218-231, eng] 41-1191
- Neoglacial advance of the Boundary Glacier, Banff National Park. Gardner, J.S., et al, [1985, p.1753-1755, eng] 41-1240
- Alberta—James River**
- Snow distribution patterns in riparian and adjacent forest. Golding, D.L., et al, [1986, p.1931-1940, eng] 41-2466
- Alberta—Kananaskis Valley**
- Extrapolating snow measurements on the Marmot Creek Experimental Basin. Bernier, P.Y., [1986, p.83-92, eng] 41-4514
- British Columbia**
- Glacier mass balance, SE Alaska and NW British Columbia. Pelto, M.S., [1987, p.189-194, eng] 41-4456
- Wave climate study, northern coast of British Columbia. [1987, 93p., eng] 41-4530
- British Columbia—Boundary Glacier**
- Headwall weathering zones, Boundary Glacier, Canada. Gardner, J.S., [1987, p.60-67, eng] 41-3597
- British Columbia—Bugaboo Glacier**
- Moraine stratigraphy of Bugaboo Glacier, British Columbia. Osborn, G., [1986, p.171-178, eng] 41-1190
- British Columbia—Coast Mountains**
- Neoglaciality in the Coast Mts., B.C., Canada. Ryder, J.M., et al, [1986, p.273-287, eng] 41-1928
- British Columbia—Glacier National Park**
- Glacier mapping in Glacier National Park, B.C. Champoux, A.C., et al, [1986, p.27-30, eng] 41-732
- Evolution of the Illecillewaet Glacier, Glacier National Park, B.C. Champoux, A.C., et al, [1986, p.31-33, eng] 41-733
- British Columbia—Meager Mountain**
- Rock avalanche from the peak of Mount Meager, British Columbia. Evans, S.G., [1987, p.929-933, eng] 41-4017
- British Columbia—Saint Elias Mountains**
- Sulphide in subglacial exploration, St. Elias Mts., B.C. Day, S.J., et al, [1987, p.723-730, eng] 41-4080
- Hudson Bay**
- Effects of ice cover on tidal currents and freshwater content. Prinsenberg, S.J., [1986, p.298-327, eng] 41-153
- Nutrient limitation of sea ice microalgae. Maestrini, S.Y., et al, [1986, p.969-982, eng] 41-1473
- Photosynthetic adaptation of sea ice microalgae in Hudson Bay. Legendre, L., et al, [1986, p.321-326, eng] 41-1554
- Ecological effects of canal diversion on Hudson and James Bays. Milko, R., [1986, p.316-326, eng] 41-2690
- Enhanced solar radiation along coastal Hudson Bay. Rouse, W.R., [1987, p.670-674, eng] 41-4209
- Hudson Strait**
- Physical oceanography of Hudson Strait and Ungava Bay. Drinkwater, K.F., [1986, p.237-264, eng] 41-2596
- James Bay**
- Ecological effects of canal diversion on Hudson and James Bays. Milko, R., [1986, p.316-326, eng] 41-2690

## Canada (cont.)

- Labrador**  
Iceberg study, Saglek, Labrador. Allen, J.H., [1973, 92p., eng] 41-3961  
Ice flow history and glacial dispersal in the Labrador Trough. Klassen, R.A., et al, [1987, p.61-71, eng] 41-4009
- Labrador—Adams Lake**  
Acoustic survey and glacial history of Adams Lake, Labrador. Bell, T., et al, [1987, p.101-110, eng] 41-4011
- Labrador—Hebron Fjord**  
Sea-ice crystal structure and salinity, Hebron Fjord, Labrador. Gow, A.J., [1987, 18p., eng] 41-4144
- Labrador—Torngat Mountains**  
Moraines and surface melt on glaciers. Rogerson, R.J., et al, [1986, p.350-354, eng] 41-4287
- Lancaster Sound**  
Effects of ice cover on tidal currents and freshwater content. Prinsenberg, S.J., [1986, p.298-327, eng] 41-153
- Mackenzie River**  
Ice regimes of the lower Mackenzie River and Mackenzie Delta. Terroux, A.C.D., et al, [1981, 64p. + append., eng] 41-2727
- Newfoundland**  
Sea ice distribution over the N.E. Newfoundland Shelf. Symonds, G., [1986, p.88-114, eng] 41-146  
Ice and ice management on the Grand Bank. Ransom, J.A.N., et al, [1986, p.561-582, eng] 41-167  
Iceberg-scour modelling at Memorial University of Newfoundland. Chari, T.R., [1986, p.109-117, eng] 41-3098  
Iceberg scouring rate studies, Grand Banks of Newfoundland. Lewis, C.F.M., et al, [1987, p.825-833, eng] 41-4013
- Newfoundland—Grand Banks**  
Ice management on the Grand Banks. Hotzel, I.S., et al, [1985, p.416-419, eng] 41-220  
Long-range forecasting of Grand Banks iceberg severity. Davidson, L.W., et al, [1986, 163p., eng] 41-1835  
Iceberg trajectory forecasting model for the Grand Banks, Newfoundland. De Margerie, S., et al, [1986, 86p., eng] 41-1836  
Grand Banks ice-scour catalogue. Schoenthaler, L., [1986, p.200-203, eng] 41-3111  
Risk assessment for iceberg-scour damage: Labrador Sea and Grand Banks. Allan, D., [1986, p.240-248, eng] 41-3116
- Newfoundland—Labrador**  
Types of evolution and slope dynamics in North Labrador. André, M.F., [1985, p.81-94, fre] 41-375
- Newfoundland Shelf**  
Seasonal ice extent on the northeast Newfoundland Shelf. Symonds, G., [1986, p.10,718-10,724, eng] 41-1011
- Northwest Territories**  
Monitoring a sump containing drilling mud with a high salt content. Nenninger, R.D., [1987, 47p., eng] 41-3076
- Northwest Territories—Arctic Archipelago**  
Patterns of High Arctic saxifrage. Grulke, N.E., et al, [1985, p.241-250, eng] 41-1245  
Glaciation and the evolution of the Canadian high arctic landscape. England, J., [1987, p.419-424, eng] 41-3319  
Isotopic composition and origin of lacustrine brines in the Arctic. Pagé, P., et al, [1987, p.210-216, eng] 41-4078
- Northwest Territories—Baffin Island**  
Nearshore sediments of eastern Baffin Island. Emory-Moore, M., [1986, 55p., eng] 41-245  
Sea ice breakup and tidal flat processes, Frobisher Bay, Baffin Island. McCann, S.B., et al, [1986, p.168-180, eng] 41-362  
Model of the Barnes Ice-Cap derived from Landsat MSS data. Lodwick, G.D., et al, [1985, p.1937-1944, eng] 41-868  
Sediments in a tidewater glacier, Baffin I., Canada. Dowdeswell, J.A., [1986, p.45-56, eng] 41-1187  
Late Quaternary glacial chronology for Baffin Island, N.W.T. Dowdeswell, J.A., [1984, p.311-320, eng] 41-1233  
Glacial dispersal train of Paleozoic erratics. Tippet, C.R., [1985, p.1818-1826, eng] 41-1242  
Glacial geology and postglacial emergence, Baffin Island, N.W.T. Clark, P., [1985, p.1864-1871, eng] 41-1243  
Pollen deposition and distribution of shrubs in the Arctic tundra. Jacobs, J.D., et al, [1985, p.279-287, eng] 41-1249  
Benthonic foraminifera from Baffin I. fiord environments. Schafer, C.T., et al, [1986, p.232-239, eng] 41-1867  
Iceberg scour distribution, Baffin Island, Canada. King, E.L., et al, [1986, p.172-181, eng] 41-3108  
Iceberg scoring off SE Baffin Island. Praeg, D., et al, [1987, p.847-857, eng] 41-4014
- Northwest Territories—Banks Island**  
Measurement of ablation of exposed ground ice. Lewkowicz, A.G., [1985, p.1767-1773, eng] 41-1241  
Periglacial processes, Banks Island, Canada. French, H.M., [1986, p.167-174, eng] 41-1875  
Ablation of exposed ground ice. Lewkowicz, A.G., [1986, p.511-519, eng] 41-4306
- Northwest Territories—Barrow Strait**  
Nutrient fluxes during extended blooms of Arctic ice algae. Cota, G.F., et al, [1987, p.1951-1962, eng] 41-2254
- Northwest Territories—Ellesmere Island**  
Arctic ice shelf growth, fiord oceanography and climate. Jeffries, M.O., et al, [1984, p.147-153, eng] 41-631  
Mapping edge of sea ice, Ellesmere Island, N.W.T. Jeffries, M.O., et al, [1986, p.96-99, eng] 41-747  
Nitrogen-fixing pseudomonads from Arctic plant roots. Lifshitz, R., et al, [1986, p.251-255, eng] 41-2493  
Ice features and movement north of Ellesmere Island, Canada. Nordlund, O.P., et al, [1987, p.32-43, eng] 41-3371  
Pollen record from the Agassiz Ice Cap, northern Ellesmere Island, Canada. Bourgeois, J.C., [1986, p.345-354, eng] 41-3470  
Periodic ice cliff avalanche, Ellesmere Island. Evans, D.J.A., et al, [1987, p.68-71, eng] 41-3598  
Mass balance of two high Arctic Plateau ice caps. Bradley, R.S., et al, [1987, p.123-128, eng] 41-3605  
Remote sensing of sea-ice growth and melt, Milne Ice Shelf, Canada. Jeffries, M.O., et al, [1987, p.145-150, eng] 41-4449
- Northwest Territories—Garrow Lake**  
Hypersaline gradients in two Canadian High Arctic lakes. Stewart, K.M., et al, [1986, p.1795-1803, eng] 41-1222
- Northwest Territories—Ibyuk Pingo**  
Growth of Ibyuk Pingo, western Arctic coast, Canada. Mackay, J.R., [1986, p.68-80, eng] 41-791
- Northwest Territories—Inuvik**  
Microbial aspects of the Inuvik sewage lagoon. Henry, J.G., et al, [1986, p.117-128, eng] 41-349  
Soil freezing and frost heave, N.W.T., Canada. Nixon, J.F., [1986, p.436-438, eng] 41-1929
- Northwest Territories—Lancaster Sound**  
Water stress and currents under sea ice. Shirasawa, K., [1986, p.14,305-14,316, eng] 41-1858
- Northwest Territories—Lapla**  
Frozen tailings pond dams. LaFlèche, P.T., et al, [1987, p.191-197, eng] 41-4012
- Northwest Territories—Mackenzie**  
Morphosedimentary zones in the Bluenose Lake region, District of Mackenzie. St-Onge, D.A., et al, [1987, p.89-100, eng] 41-4010
- Northwest Territories—Mackenzie River Delta**  
Seismic cone penetration testing, offshore of the Mackenzie Delta. Campanella, R.G., et al, [1987, p.154-159, eng] 41-2979
- Northwest Territories—Norman Wells**  
Norman Wells Expansion Project—overview. Tibbatts, R.M., [1986, p.51-59, eng] 41-2514  
Design of Norman Wells pipeline for frost heave and thaw settlement. Nixon, J.F., et al, [1986, p.67-85, eng] 41-2516
- Northwest Territories—Queen Elizabeth Islands**  
Ice thickness data, 1978-80, Queen Elizabeth Is., N.W.T. Wetzel, V.F., [1981, 35p., eng] 41-3925
- Northwest Territories—Richard Island**  
Massive ground ice and geology in continuous permafrost. Dallimore, S.R., et al, [1987, p.913-918, eng] 41-4016
- Northwest Territories—Sophia Lake**  
Hypersaline gradients in two Canadian High Arctic lakes. Stewart, K.M., et al, [1986, p.1795-1803, eng] 41-1222
- Northwest Territories—White Glacier**  
Stagnant ice at the bed of White Glacier, Axel Heiberg Island, N.W.T., Canada. Blatter, H., [1987, p.35-38, eng] 41-4431
- Northwest Territories—Yellowknife**  
Sewage treatment in Yellowknife, N.W.T. Soniasy, R.N., et al, [1986, p.129-139, eng] 41-350
- Nova Scotia**  
Analysis of potential slope instability due to wave loading on the Nova Scotian shelf. Moran, K., et al, [1986, p.980-999, eng] 41-3171  
Seafloor stability study, inner Scotian Shelf. Judge, J.T., et al, [1987, 80p., eng] 41-4531
- Ontario**  
Role of salt in snow and ice control in Ontario. McBride, N., et al, [1979, 68p., eng] 41-236  
Ontario municipal experiments to reduce the use of road salt. Fabricius, T., et al, [1980, 95p., eng] 41-238  
Winter maintenance practice and research in Ontario. Fromm, H.J., [1978, p.1-4, eng] 41-378  
Spatial analysis of snow- and rain-generated highflows in southern Ontario. Irvine, K.N., et al, [1987, p.140-149, eng] 41-4076
- Ontario—James Bay**  
Breakup of small rivers in the Subarctic. Woo, M.-K., et al, [1987, p.784-795, eng] 41-4081
- Ontario—Munee Bay**  
Diamicton mass in glacial Lake Munee III sediments, S.W. Ontario. Stewart, R.A., [1987, p.844-849, eng] 41-4082
- Ontario—Thunder Bay**  
Thunder Bay management program, 1979-1985: overview report. Gillies, T.K., [1986, 86p., eng] 41-2184
- Quebec**  
Peat inception and climatic change in northern Quebec. Payette, S., [1984, p.173-179, eng] 41-2006  
Seasonal variation of soil erosion by water in southwestern Quebec. Kirby, P.C., et al, [1987, p.55-63, eng] 41-2726  
Seasonal water budget models, Quebec, Canada. Wright, R.K., [1984, p.125-141, eng] 41-3354
- Quebec—Knob Lake**  
Archive of the ice record from Knob Lake, Quebec, 1954 to present. Adams, P., et al, [1985, p.284-289, eng] 41-1506
- Quebec—Trois-Pistoles**  
Mineralogic distribution of the sand fraction due to ice drifting. Drapeau, G., et al, [1985, p.51-56, fre] 41-2286
- Quebec—Ungava**  
Acid neutralizing capacity of glacial sediments in western Ungava. Wilson, H., et al, [1986, p.69-85, eng] 41-346
- Rocky Mountains**  
Alpine debris fans in the Canadian Rocky Mountains. Sauchyn, D.J., [1986, p.191-217, eng] 41-1255  
Vascular plants of mountain talus slopes, Mt. Rae area, Alberta, Canada. Kershaw, L.J., et al, [1986, p.218-230, eng] 41-1256  
Reconstruction of Little Ice Age events in the Canadian Rocky Mountains. Luckman, B.H., [1986, p.17-28, eng] 41-2703
- Saint Elias Mountains**  
Holocene paleohydrology of the St. Elias Mountains, British Columbia and Yukon. Johnson, P.G., [1986, p.47-53, eng] 41-2706
- Saskatchewan**  
Snow and water chemistry of lakes in northern Saskatchewan. Shewchuk, S.R., [1983, 62p., eng] 41-2578
- Torngat Mountains**  
Cirque glacier mass balance, Torngat Mts. Labrador. Rogerson, R.J., [1986, p.41-680, eng] 41-680
- Ungava Bay**  
Physical oceanography of Hudson Strait and Ungava Bay. Drinkwater, K.F., [1986, p.237-264, eng] 41-2596
- Yukon Territory**  
Report of activities, 1984-1985. [1986, 21p., eng] 41-1678  
Investigations of Pleistocene glacial drift in the central Yukon. Smith, C.A.S., et al, [1986, p.29-37, eng] 41-2704
- Yukon Territory—Icefield Ranges**  
Surface wind along the Icefield Ranges, Yukon Territory, Canada. Nickling, W.G., et al, [1985, p.125-134, eng] 41-1224
- Capillarity**  
Moisture in hygroscopic materials. Efimov, S.S., [1986, 160p., rus] 41-1044  
Biochemical anomalies in permafrost zone and their interpretation. Lobanova, A.B., [1987, p.170-172, eng] 41-3163
- Capillary ice**  
Frost resistance of autoclaved materials. Pinsker, V.A., [1986, p.31-39, rus] 41-4501
- Carbon dating**  
See: Radioactive age determination
- Carbon dioxide**  
Global ice-sheet system interlocked by sea level. Denton, G.H., et al, [1986, p.3-26, eng] 41-611  
Carbon balance of arctic tundra. Peterson, K.M., et al, [1984, p.331-335, eng] 41-1234  
Additional precipitation by seeding stratiform clouds. Khushid, S.V., [1986, p.27-31, rus] 41-1448  
Recent trends in the potential role of seasonal snow cover in the CO<sub>2</sub> induced climate change. Li, P., [1986, p.176-178, chi] 41-1466  
Ice core record of the C-13/C-12 ratio of atmospheric CO<sub>2</sub> in the past two centuries. Friedli, H., et al, [1986, p.237-238, eng] 41-1631  
Carbonated ice process and product. Hinman, D.C., et al, [1983, 10 col., eng] 41-1768  
CO<sub>2</sub> snow-making process. Crowe, O.F., et al, [1983, 10 col., eng] 41-1769  
Process for preparing gasified ice of improved stability. Kleiner, F., et al, [1983, 10 col., eng] 41-1770  
CO<sub>2</sub> snow forming copper line. Franklin, P.R., Jr., [1983, 4 col., eng] 41-1775  
Possible CO<sub>2</sub>-induced warming effects on the cryosphere. Barry, R.G., [1984, p.571-604, eng] 41-1973  
Impacts of increasing CO<sub>2</sub> on natural vegetation, particularly the tundra. Oechel, W.C., et al, [1986, p.36-42, eng] 41-2217  
Review of the history of atmospheric CO<sub>2</sub> recorded in ice cores. Oeschger, H., et al, [1986, p.89-108, eng] 41-2221  
Ice cores tell composition of ancient atmospheres. Stauffer, B., [1985, p.72-73, eng] 41-2632  
Siple ice core data reveals biospheric CO<sub>2</sub> emissions. Siegenthaler, U., et al, [1987, p.140-154, eng] 41-3196  
Polar ice cores. Palais, J.M., [1987, p.55-60, eng] 41-3937

- Ice sheets and the CO<sub>2</sub> problem. Van der Veen, C.J., [1987, p.1-42, eng] 41-4136
- Ice-core CO<sub>2</sub> data and biotic CO<sub>2</sub> sources. Enting, I.G., et al, [1987, p.318-325, eng] 41-4207
- Ice calving, carbon dioxide and control of ice ages. Lockwood, J.G., [1985, p.89-96, eng] 41-4276
- Carbon isotopes**
- Application of (14)C dating to the studies of glacial geology and geocryology. Gu, G., et al, [1986, p.159-165, chij] 41-1463
- Ice borehole gas sampler for isotopic dating. Zemtsov, A.A., et al, [1984, p.72-78, rus] 41-2355
- Gelfluction lobe at Jotunheimen, Norway. Matthews, J.A., et al, [1986, p.345-360, eng] 41-3565
- Carburators**
- Calculational method for determination of carburator icing rate. Nazarov, V.I., et al, [1985, p.544-546, eng] 41-2944
- Cargo**
- Unloading of a large tanker near Mirnyy Station. Kozlovskii, A.M., et al, [1986, p.116-119, rus] 41-1267
- Use of sea ice for cargo unloading. Nazintsev, I.U., et al, [1986, p.120-126, rus] 41-1268
- Tugboat-barge equipped for ice navigation. [1985, p.80-81, rus] 41-1520
- Finland to build ice-breaking cargo ships and snow-going vehicles. [1985, p.100-102, rus] 41-1521
- Operation of light air cushion vehicle at McMurdo Sound. Dibbern, J.S., [1987, 13pp., eng] 41-2257
- Automated navigational aids for icebreaking cargo ships. Koshevov, A.A., et al, [1987, p.20-22, rus] 41-2785
- Ship operations, 1984-1985. Marthaler, J.G., [1985, p.267-269, eng] 41-3328
- Navigation and ship control. Collection of works. Panin, I.U., ed, [1986, 137p., rus] 41-3383
- Icebreaker pilotage of "Dmitrii Donskoi" type ships along the Yenisey River in the winter-spring season. Plotnikov, K.S., [1986, p.98-103, rus] 41-3384
- To change the tactics of ship pilotage in ice. Leskov, M., [1987, p.30-31, rus] 41-3613
- Cartography**
- See: Mapping
- Caves**
- Report on Solnzan wind hole and ice accretion mechanism. Fujiwhara, S., [1986, p.261-266, eng] 41-2331
- See also: Ice caves; Subglacial caves
- Cavitation**
- Kinematic model of ice penetration with lateral loading. Young, C.W., et al, [1986, p.473-479, eng] 41-2672
- Response of penetrators into ice targets. Kipp, R.J., et al, [1986, p.481-493, eng] 41-2673
- Some developments in shaped charge technology. Mellor, M., [1986, p.575-604, eng] 41-2678
- Some developments in shaped charge technology. Mellor, M., [1986, 29p., eng] 41-3049
- Cellular concretes**
- Service life of cellular concrete products. Silaenkov, E.S., [1986, 175p., rus] 41-1683
- Frost resistance criteria of cellular, autoclave-hardened concretes. Shefkin, A.E., et al, [1986, p.31-32, rus] 41-1884
- Research in building engineering. Structural thermodynamics. Service life of structures. Polonskii, V.P., ed, [1986, 179p., rus] 41-4500
- Frost resistance of autoclaved materials. Pinsker, V.A., [1986, p.31-39, rus] 41-4501
- Cellular materials**
- Thermal performance of rigid cellular foam insulation at subfreezing temperatures. Aldrich, D.F., et al, [1986, p.500-509, eng] 41-1384
- Protected membrane flat roofs. Christensen, G., [1986, p.974-984, eng] 41-1390
- Cellular plastics**
- Plastic foam—from frost protection to road embankments. Refsdal, G., [1985, p.16-19, eng] 41-335
- Scientific and technical progress in road construction. Altmatov, I.T., ed, [1984, 188p., rus] 41-785
- Influence of thermoinsulative layers on temperature regime of road pavements. Dulshenaliev, M., [1984, p.140-145, rus] 41-786
- Polystyrene foam used in construction of road and airport pavements. Ivanov, V.N., [1986, p.14-16, rus] 41-1882
- Thermally insulated pipes for construction of industrial overground engineering nets. Rublev, V.A., et al, [1986, p.28-29, rus] 41-2781
- Efficiency of using foam plastics as hydro-thermoinulative materials for electrical heating plants. Valgin, V.D., et al, [1986, p.17-18, rus] 41-2795
- Ductless method of laying pipes with phenol-poroplast insulation. Nesterov, V.I., et al, [1986, p.18-20, rus] 41-2796
- See also: Thermal insulation
- Cement admixtures**
- Problems in soil stabilization. Motylev, I.U., [1986, p.10-11, rus] 41-513
- Stabilization of fine-grained soil for road and airfield construction. Danyluk, L.S., [1986, 37p., eng] 41-540
- Concrete admixtures handbook; properties, science, and technology. Ramachandran, V.S., ed, [1984, 626p., eng] 41-1030
- Cement science. Ramachandran, V.S., et al, [1984, p.1-53, eng] 41-1031
- Porosity and frost resistance of portland cement mortars. Feldman, R.F., [1986, p.973-989, eng] 41-1154
- Cements**
- Concretes with polyfunctional admixtures. Sudakov, V.B., et al, [1985, p.13-17, rus] 41-416
- Problems in soil stabilization. Motylev, I.U., [1986, p.10-11, rus] 41-513
- Reaction of loess soils with hydrofluosilicic acid and carbamide resins. Zagadai, L.K., et al, [1986, p.53-57, rus] 41-601
- Assessment of freeze-thaw damage in cement stabilised soils. Kettle, R.J., [1986, p.16-31, eng] 41-641
- Reducing the amount of cement and fuel used in the production of prefabricated reinforced concrete. Dvorkin, L.I., [1985, 99p. (Pertinent p.50-69), rus] 41-650
- Chemical stabilization of noncohesive soils. Mitrakov, V.I., et al, [1986, p.25-27, rus] 41-1528
- Concretes with unsorted sand-gravel for cold regions. Sadovich, M.A., et al, [1986, p.50-53, rus] 41-1924
- Ice formation in hardened cement paste. Bager, D.H., et al, [1986, p.709-720, eng] 41-1998
- Ice formation in hardened cement paste. Bager, D.H., et al, [1986, p.835-844, eng] 41-2000
- Physical properties of asphalt cements used in Quebec from 1979 to 1986. Boudreau, J., [1986, p.302-319, eng] 41-2206
- Winter concreting at the Bol'shoy Almaatinskij Channel. Garfulin, V.M., et al, [1985, p.18-19, rus] 41-2552
- Calculating frost resistance of concrete used in land reclamation construction. Shlaen, A.G., [1986, p.19-22, rus] 41-2553
- Increasing the thermoinsulative properties of lightweight concrete panels. Natsievskii, I.U.D., [1986, 88p., rus] 41-2647
- Interaction of polymer admixtures with cements in concretes. Kozlova, V.K., et al, [1986, p.59-62, rus] 41-2756
- Using dry, low-cement concretes in permafrost areas. Zal'taman, O.M., et al, [1986, p.31-35, rus] 41-2867
- Concrete work at the Kureyskaya power plant site. Bukhman, V.I., [1986, p.50-54, rus] 41-2869
- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968
- Guide to soil stabilization by injection. [1986, 129p., rus] 41-3608
- Studies of pore structure of concretes with air-entrainment admixtures. Ianbykh, N.N., [1987, p.34-35, rus] 41-3614
- Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al, [1986, p.29-33, rus] 41-3767
- Facade elements clad with clinker finish. Orantie, K., [1987, 36p. + append., fin] 41-3844
- Effects of freeze-thaw cycles on the microstructure of hydration products. Pigeon, M., et al, [1986, p.1-19, eng] 41-4141
- Making concrete dams monolithic by cementing structural joints. Argal, E.S., [1987, 119p., rus] 41-4150
- Research in building engineering. Structural thermodynamics. Service life of structures. Polonskii, V.P., ed, [1986, 179p., rus] 41-4500
- Frost resistance of autoclaved materials. Pinsker, V.A., [1986, p.31-39, rus] 41-4501
- Studying shear strength of ash-slag wastes from thermal power plants located in the Northern climatic zone. Ogarkov, A.A., [1987, p.75-78, rus] 41-4624
- See also: Soil cement
- Chambers**
- See: Cloud chambers; Cold chambers
- Channels (waterways)**
- Frost heave of a channel with concrete lining. Zhu, D., et al, [1986, p.201-208, chij] 41-1416
- Anti-heave effect of wind-blown sands in irrigation canals. Zhu, D., et al, [1986, p.239-244, chij] 41-1422
- Soil slope stability in a channel with plastic lining. Zhou, L., [1986, p.245-248, chij] 41-1423
- Frost heave damage control in hydraulic structures. Wei, G., [1986, p.295-298, chij] 41-1434
- Anti-heave technology survey for hydraulic structures. Chen, X., [1986, p.305-308, chij] 41-1436
- Concrete linings of hydraulic structures to prevent frost heave. Zhu, C., [1986, p.309-312, chij] 41-1437
- Mechanism of ice breakup on rivers and canals. Kozitskii, I.E., [1982, p.70-82, eng] 41-1442
- Winter concreting at the Bol'shoy Almaatinskij Channel. Garfulin, V.M., et al, [1985, p.18-19, rus] 41-2552
- Designing canal linings for frost heaving ground. Alimov, A.G., [1986, p.19-24, rus] 41-2554
- Free boundary problems. Stojanovic, S.D., [1986, 93p., eng] 41-2642
- Ecological effects of canal diversion on Hudson and James Bays. Milko, R., [1986, p.316-326, eng] 41-2690
- Blasting work in ground and rocks. Kucheriavii, F.I., ed, [1986, 128p., rus] 41-2903
- Peat excavation by blasting in channel construction. Fraah, G.B., [1986, p.54-61, rus] 41-2905
- Resistance of ice models in a test channel. Baker, D.N., [1986, 15p., fre] 41-3244
- Calculating the non-erosive velocity of a stream for sandy ground in freezing weather. Skrebkov, G.P., et al, [1986, p.74-77, rus] 41-3260
- Ice formation in a curved channel and heat transfer at water-ice interface. Ishimiya, K., et al, [1987, p.294-301, eng] 41-3401
- Channel processes, changes, and sediments in a proglacial braided river. Ashworth, P.J., et al, [1986, p.361-371, eng] 41-3566
- Formation processes of brine drainage channels in sea ice. Wakatsuchi, M., et al, [1987, p.7195-7197, eng] 41-4272
- Charts**
- Mudflow-hazard areas of northern Caucasus. Gerasimov, V.A., [1985, p.39-46, rus] 41-843
- Regionalization of northwestern Siberia according to thermokarst development. Parmuzin, S.I.U., [1986, p.78-85, rus] 41-3488
- Southern boundary of permafrost distribution within the West Siberian Plain. Trofimov, V.T., et al, [1986, p.106-113, rus] 41-3776
- Using spaceborne photography data in studying forests and swamps. Gorozhankina, S.M., [1986, p.169-189, rus] 41-3973
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, [1984, 193p., rus] 41-4086
- Hydromeliorative regionalization of West Siberia from space photographs. Gorozhankina, S.M., [1984, p.16-25, rus] 41-4087
- Soil climate in southeastern West Siberia. Az'muka, T.I., et al, [1984, p.26-31, rus] 41-4088
- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus] 41-4120
- See also: Maps; Meteorological charts
- Chemical analysis**
- Description of the building materials data base for Portland, Maine. Merry, C.J., et al, [1986, 83p., eng] 41-662
- Atmospheric toxic metals in snow and ice. Boutron, C.F., [1986, p.467-505, eng] 41-672
- Chemical migration in mid latitude snow pack. Hogan, A.W., et al, [1985, p.243-254, eng] 41-1500
- Abnormally enriched elemental concentrations in urban snow. Drake, J.J., et al, [1985, p.255-261, eng] 41-1501
- Variations in ionic composition between High Arctic lake and land snowpack. Allan, C., et al, [1985, p.277-283, eng] 41-1505
- Variation of sulfate content in Arctic atmospheric precipitation during the last 90 years. Astratov, M.I.U., et al, [1986, p.38-42, eng] 41-1690
- Chemistry of deicing roads: breaking the bond between ice and road. Trost, S.E., et al, [1987, p.15-26, eng] 41-2068
- Potential effects of acid rain on glaciated terrain. Shilts, W.W., [1984, p.135-156, eng] 41-2117
- Low temperature effects on organophosphonates. Britton, K.B., [1986, 47 refs., eng] 41-3050
- Snow chemistry from Xixabangma Peak, Tibet. Mayewski, P.A., et al, [1986, p.542-543, eng] 41-4312
- See also: Frozen ground chemistry; Isotope analysis; Soil analysis
- Chemical composition**
- Problems of chemical defence operations in extreme cold. Stearman, R.L., [1985, 46p. + 2 appends., eng] 41-477
- Martian polar caps: a review. Masson, P.L., [1985, p.521-534, eng] 41-1722
- Influence of boreal forest cover on the chemical composition of snowcover. Jones, H.G., [1984, p.126-138, eng] 41-1953
- Basic components of chemical balance of the Arctic Ocean. Rusanov, V.P., [1986, p.40-51, rus] 41-4195
- See also: Atmospheric composition; Frozen ground chemistry; Geochemistry; Ice composition; Snow composition; Soil chemistry; Soil composition; Water chemistry
- Chemical ice prevention**
- Effects of road salt upon stream invertebrates. Kersey, K., [1979, 12p. + append., eng] 41-232
- Physics of snow and ice control on roads and highways. Hanley, K., [1979, 15p., eng] 41-233
- Chlorides in the Don River watershed resulting from road de-icing salt. Paine, R.L., [1979, 23p., eng] 41-234
- Role of salt in snow and ice control in Ontario. McBride, N., et al, [1979, 68p., eng] 41-236
- Sodium in domestic wells of York region. Joy, M., [1979, 17p., eng] 41-237
- Ontario municipal experiments to reduce the use of road salt. Fabricius, T., et al, [1980, 95p., eng] 41-238
- Application rates of salt on highways and sidewalks. Adamache, M., et al, [1980, 51p., eng] 41-239
- Winter maintenance practice and research in Ontario. Fromm, H.J., [1978, p.1-4, eng] 41-378
- Chemistry of the automotive environment. Baboian, R., [1978, p.14-23, eng] 41-380

**Chemical ice prevention (cont.)**

- Development and use of a new melting agent. Washüttl, J., 1985, p.49-57, ger 41-390
- Potential for use of natural brines in highway applications. Sack, W.A., et al., 1985, p.1-8, eng 41-654
- Calcium magnesium acetate research in Washington State. Ernst, D.D., et al., 1985, p.8-12, eng 41-655
- State-of-the-art of ground aircraft deicing technology. Mayer, D., 1986, 13p., eng 41-1354
- Effect of salt application on roadway safety and mobility. Jones, P.H., et al., 1986, 90p., eng 41-1413
- Concrete pavers for aircraft pavement surfaces. Emery, J.A., 1986, p.609-623, eng 41-1546
- Deicing/anti-icing fluid—runways and taxiways. 1980, 8p., eng 41-1757
- Urea compound, shotged. 1979, 7p., eng 41-1759
- Urea compound, powder. 1979, 7p., eng 41-1760
- Method of preparing snow and ice control compositions. Stockel, R.F., 1983, 6 col., eng 41-1776
- Chemistry of deicing roads: breaking the bond between ice and road. Trost, S.E., et al., 1987, p.15-26, eng 41-2068
- Water pollution from roadways. Lygren, E., et al., 1985, 46p., nor 41-2295
- Winter maintenance of roads. Popp, C., 1986, p.536-540, ger 41-2324
- Studies on the residual effects of de-icing salts. Kutter, M., et al., 1986, p.5-12, ger 41-2325
- Chemical method of treating soils. Migliachenko, V.P., 1986, p.17-18, rus 41-2556
- Energy-saving techniques for winter works. Zhufko, P.I.A., 1986, p.18-20, rus 41-2557
- Ice destruction. Methods and technology. Bogorodskii, V.V., et al., 1986, 214p., eng 41-2564
- Calculational method for determination of carburetor icing rate. Nazarov, V.I., et al., 1985, p.544-546, eng 41-2944
- Canadian Building Congress, 4th, 1985. 1985, 381p., eng 41-3190
- Parking garage problem. Litvan, G.G., 1985, p.214-218, eng 41-3192
- Resistance of concrete pavements to frost, and chemical deicing agents. Plahn, J., et al., 1987, p.87-92, ger 41-3547
- Concrete durability. 1987, 2179p. (2 vols.), eng 41-3690
- Concrete durability in bridges. Hawkins, M., 1987, p.397-421, eng 41-3698
- Durability of concrete bridges in Belgium—balance of the systematic inspection. Van Begin, C., 1987, p.541-554, eng 41-3700
- Improvement of concrete durability against intrusion of chloride-laden water by using sealers, coatings and various admixtures. Marusin, S., 1987, p.599-619, eng 41-3701
- Theoretical aspect and methods of testing concrete resistance to freezing and deicing chemicals. Biegovic, D., et al., 1987, p.947-971, eng 41-3715
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al., 1987, p.1155-1182, eng 41-3722
- Major concrete durability problems. Newman, K., 1987, p.1259-1283, eng 41-3726
- Reinforcement corrosion and the use of CSF-based additives. Fijdestol, P., 1987, p.1445-1458, eng 41-3731
- Corrosion protection of the concrete components of bridges. Manning, D., 1987, p.1527-1547, eng 41-3732
- Benefits and costs in the use of salt to deice highways. Brenner, R., et al., 1976, 140p., eng 41-4606
- Corrosive deicing chemicals and winter road maintenance. Nottingham, D., et al., 1983, 35p., eng 41-4607
- See also: Salting
- Chemical properties**
- Airborne measurements of the antarctic cloud water acidity. Saxena, V.K., et al., 1985, p.201-203, eng 41-3323
- Snow chemistry of an Austrian glacier. Psenner, R., et al., 1986, p.1-18, eng 41-3522
- Cationic denudation rate of an alpine glacial catchment. Metcalf, R.C., 1986, p.19-22, eng 41-3523
- Chemical properties of snow in the northeastern United States. Kumai, M., 1987, p.(C1)625-(C1)630, eng 41-3959
- Chemistry**
- De-icing chemicals used in North America and overseas. Keyser, J.H., 1978, p.5-13, eng 41-379
- Chemistry of the automotive environment. Baboian, R., 1978, p.14-23, eng 41-380
- Chernozem**
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed., 1984, 193p., rus 41-4086
- Thermal properties of cryogenic meadow-chernozem soils. Kulikov, A.I., 1984, p.126-130, rus 41-4090
- Chile**
- Patagonia**
- Glacier variations and their causes, Patagonia, Chile. Aniya, M., et al., 1986, p.307-316, eng 41-1178

- Outline of the Glaciological Research Project in Patagonia, 1985-1986. Nakajima, C., 1987, p.1-6, eng 41-3821
- Summer climate of the Northern Patagonia Icefield. Inoue, J., et al., 1987, p.7-14, eng 41-3822
- Characteristics of precipitation and vertical structure of air temperature in the northern Patagonia. Fujiyoshi, Y., et al., 1987, p.15-23, eng 41-3823
- Wind regime of San Rafael Glacier, Patagonia. Inoue, J., 1987, p.25-30, eng 41-3824
- Meteorological measurements at Soler Glacier, Patagonia, in 1985. Fukami, H., et al., 1987, p.31-36, eng 41-3825
- Ablation of ice and heat balance on Soler Glacier, Patagonia. Fukami, H., et al., 1987, p.37-42, eng 41-3826
- Ice thickness deduced from gravity anomalies in Patagonia. Casassa, G., 1987, p.43-57, eng 41-3827
- Glaciological characteristics of an ice core in Patagonia. Yamada, T., 1987, p.59-67, eng 41-3828
- Structural and morphological characteristics of Soler Glacier, Patagonia. Aniya, M., et al., 1987, p.69-77, eng 41-3829
- Characteristics of ice flow of Soler Glacier, Patagonia. Naruse, R., 1987, p.79-85, eng 41-3830
- Ice avalanches on Soler Glacier, Patagonia. Kobayashi, S., et al., 1987, p.87-90, eng 41-3831
- Hydrological characteristics of Soler Glacier drainage, Patagonia. Fukami, H., et al., 1987, p.91-96, eng 41-3832
- Cooling of water and air by melting ice. Fujiyoshi, Y., et al., 1987, p.97-102, eng 41-3833
- Water depth of Lagoon San Rafael, Patagonia. Nakajima, C., et al., 1987, p.103-105, eng 41-3834
- Moraine formation at Soler Glacier, Patagonia. Aniya, M., 1987, p.107-117, eng 41-3835
- Recent retreat of Soler Glacier, Patagonia as seen from vegetation recovery. Sweda, T., 1987, p.119-124, eng 41-3836
- Dendrochronologies of San Rafael and Soler areas, Patagonia. Sweda, T., et al., 1987, p.125-132, eng 41-3837
- Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield. Naruse, R., et al., 1987, p.133-140, eng 41-3838
- Aspects of glacial hydrology in Patagonia. Peña, H., et al., 1987, p.141-150, eng 41-3839
- Ice core drilling operations in the Northern Patagonia Icefield. Yamada, T., et al., 1987, p.151-155, eng 41-3840
- Aerial surveys over the Patagonia Icefields. Aniya, M., 1987, p.157-161, eng 41-3841
- San Rafael Glacier**
- Summer climate of the Northern Patagonia Icefield. Inoue, J., et al., 1987, p.7-14, eng 41-3822
- Glaciological characteristics of an ice core in Patagonia. Yamada, T., 1987, p.59-67, eng 41-3828
- Water depth of Lagoon San Rafael, Patagonia. Nakajima, C., et al., 1987, p.103-105, eng 41-3834
- Ice core drilling operations in the Northern Patagonia Icefield. Yamada, T., et al., 1987, p.151-155, eng 41-3840
- Soler Glacier**
- Mapping of Soler Glacier, Chile. Aniya, M., et al., 1986, p.8-10, eng 41-729
- Summer climate of the Northern Patagonia Icefield. Inoue, J., et al., 1987, p.7-14, eng 41-3822
- Meteorological measurements at Soler Glacier, Patagonia, in 1985. Fukami, H., et al., 1987, p.31-36, eng 41-3825
- Structural and morphological characteristics of Soler Glacier, Patagonia. Aniya, M., et al., 1987, p.69-77, eng 41-3829
- Characteristics of ice flow of Soler Glacier, Patagonia. Naruse, R., 1987, p.79-85, eng 41-3830
- Ice avalanches on Soler Glacier, Patagonia. Kobayashi, S., et al., 1987, p.87-90, eng 41-3831
- Hydrological characteristics of Soler Glacier drainage, Patagonia. Fukami, H., et al., 1987, p.91-96, eng 41-3832
- Moraine formation at Soler Glacier, Patagonia. Aniya, M., 1987, p.107-117, eng 41-3835
- Recent retreat of Soler Glacier, Patagonia as seen from vegetation recovery. Sweda, T., 1987, p.119-124, eng 41-3836
- Tyndall Glacier**
- Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield. Naruse, R., et al., 1987, p.133-140, eng 41-3838
- China**
- Cartographic methods for large-scale glacier maps. Yin, S., et al., 1986, p.192-195, eng 41-768
- Shaft sinking in water-bearing noncompetent strata in China. Ma, Y., et al., 1985, p.1434-1437, eng 41-857
- Influence of freezing on strata behavior. Stoss, K., et al., 1985, p.1438-1444, eng 41-858
- Outline of avalanches in China. Wang, Y., et al., 1986, p.11-18, eng 41-1300
- Report of the third Chinese conference on permafrost. Péwé, T.L., 1986, p.89-95, eng 41-3529

- Bohai Bay**
- Experimental investigations on scale effect of Bohai sea ice. Shen, W., et al., 1987, p.173-179, eng 41-2419
- Probabilistic analysis of sea ice in North Bohai Bay. Liu, T., et al., 1987, p.387-391, eng 41-2447
- Qaidam Basin**
- Distribution of existing glaciers in the Qaidam Basin. Yang, H., et al., 1986, p.171-175, chi 41-1465
- Qilian Mountain**
- Application of NOAA/TIROS satellite data to snowmelt-runoff of Heihe Basin in Qilian Mountain. Zhang, S., et al., 1986, p.119-130, chi 41-1459
- Snow survey in the Qilian Mt. basin, NW China. Liu, Z.K., et al., 1986, p.1335-1340, eng 41-2139
- Qinghai-Xizang Plateau**
- Study on land evaporation and dry-wet state of Qinghai-Xizang Plateau. Zeng, Q., et al., 1986, p.131-142, chi 41-1460
- Types and characteristics of modern periglacial along the Qinghai-Xizang Highway. Wang, S., 1986, p.149-158, chi 41-1462
- Perennially frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation. Tong, B., et al., 1986, p.66-78, rus 41-2541
- Quaternary glaciation and paleogeography of West Kunlun Mountains. Zheng, B., 1987, p.93-102, eng 41-3920
- Qingzang Plateau**
- Modern glaciers on the south slope of West Kunlun Mountains. Zhang, Z., et al., 1987, p.85-91, eng 41-3919
- Qilian Mountain**
- Satellite snow-cover monitoring and runoff in the Qilian Mts. China. Zeng, Q., et al., 1987, p.225-228, eng 41-4464
- Tian Shan**
- Application of (14)C dating to the studies of glacial geology and geocryology. Gu, G., et al., 1986, p.159-165, chi 41-1463
- New progress of glacier inventory in Tianshan Mountains. Liu, C., et al., 1986, p.167-170, chi 41-1464
- Urumqi Glacier No.1**
- Basal sliding and drift deformation in a China glacier. Echelmeyer, K., et al., 1987, p.83-98, eng 41-3601
- West Kunlun Mountains**
- Permafrost and periglacial phenomena in West Kunlun Mountains of China. Li, S., 1987, p.103-109, eng 41-3921
- Discharge from a glacier in West Kunlun Mts., China. Nakawo, M., et al., 1987, p.111-114, eng 41-3922
- Chlorophylls**
- Seasonal variation of chlorophyll-a in fast ice near Davis Station. Lu, P., 1986, p.11-19, chi 41-397
- Observations of chlorophylls in high arctic sea ice in winter. Roberts, A.T., et al., 1984, p.148-152, eng 41-1956
- Phytoplankton in marine sediments of Frobisher Bay. Hsiao, S.I.C., 1987, p.245-251, eng 41-3685
- Chukchi Sea**
- 1985 field studies, Beaufort and Chukchi Seas, conducted from the NOAA ship *Discoverer*. Miley, J.M., ed., 1986, 57p. + figs., eng 41-831
- Northward flow in the Bering and Chukchi seas. Overland, J.E., et al., 1987, p.7097-7105, eng 41-4264
- Beaufort-Chukchi ice margin data from Seasat: ice motion. Carsey, F., et al., 1987, p.7163-7172, eng 41-4268
- Circulation**
- See: Atmospheric circulation; Drift; Ocean currents
- Cirque glaciers**
- Cirque glacier mass balance, Torngat Mts. Labrador. Rogerson, R.J., 1986, p.41-680, eng 41-680
- Recession of Grasshopper Glacier, Montana since 1898. Ferrigno, J.G., 1986, p.65-68, eng 41-740
- Headwall weathering zones, Boundary Glacier, Canada. Gardner, J.S., 1987, p.60-67, eng 41-3597
- Cirques**
- Ice cover on Kerguelen during the last glacial. Hall, K., 1984, p.225-232, eng 41-481
- City planning**
- See: Urban planning
- Classifications**
- Botany of Bouvet Island. 1986, 79p., eng 41-915
- Bryophytes on Bouvetöya. Bell, B.G., et al., 1986, p.11-22, eng 41-917
- Macrolichens of Bouvetöya. Jørgensen, P.M., 1986, p.23-34, eng 41-918
- Crustose lichens of Bouvetöya. Øvstedal, D.O., 1986, p.35-56, eng 41-919
- Lichenicolous ascomycetes from Bouvetöya. Øvstedal, D.O., et al., 1986, p.57-60, eng 41-920
- Lamprospora miniatopsis* Spooner, a bryophilous discomycete from Bouvetöya. Schumacher, T., 1986, p.61-64, eng 41-921
- Algal vegetation of Bouvet Island. Klaveness, D., et al., 1986, p.65-69, eng 41-922
- Southern tundras in the system of zonal subdivision. Chernov, I.U.I., et al., 1986, p.192-204, rus 41-1341
- Problems of snow cover classification when studying its trafficability by different type vehicles. Ushakov, A.I., 1986, p.146-149, rus 41-1658



- Rules for the classification and construction of sea-going ships. [1986, 680p., eng] 41-1682
- Classification of exogenic relief-forming processes on land. Vyrtkin, V.B., [1986, p.20-24, rus] 41-2247
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] 41-2289
- Formation of frozen rocks and forecasts of cryogenic processes. Kaplina, T.N., ed, [1986, 228p., rus] 41-2813
- On cryogenic formations. Kaplina, T.N., [1986, p.3-14, rus] 41-2814
- Classifier of cryogenic rock-heave. Lefman, M.O., et al, [1986, p.97-103, rus] 41-2825
- Naleds of the northern Yenisey River area. Rivkin, F.M., [1986, p.132-138, rus] 41-2830
- Classification of ambiguous ice particle shadowgraphs by consensus. Dyer, R.M., et al, [1985, p.675-679, eng] 41-3218
- Fundamentals of avalanche science. Bozhinskiy, A.N., et al, [1987, 280p., rus] 41-4129
- Genetic and facies analysis of glacial deposits. Zolnikov, I.D., [1986, 78p., rus] 41-4523
- See also: Landscape types; Soil classification
- Clastrates**
- Clastrite hydrates in the solar system. Miller, S.L., [1985, p.59-79, eng] 41-1697
- Icy satellites, rings and Pluto. Klinger, J., [1985, p.621-629, eng] 41-1727
- Atmospheres of icy bodies. Owen, T., [1985, p.731-740, eng] 41-1734
- Summary of the highlights of the conference. Smoluchowski, R., [1985, p.859-864, eng] 41-1742
- Guest molecule size effect on behavior of clathrate hydrates. Anderson, P., et al, [1983, p.1423-1432, eng] 41-2246
- Interaction between cryolithozone and natural gases of the underground hydrosphere. Romanovskiy, N.N., [1986, p.3-17, rus] 41-2543
- Clay minerals**
- Late Pleistocene sedimentation processes on the antarctic continental shelf. Grobe, H., [1986, 121p. + figs., ger] 41-267
- Residues from dispersions of clay and ice on Martian polar deposits. Saunders, R.S., et al, [1986, p.94-104, eng] 41-527
- Cyclic swelling of clays. Osipov, V.I., et al, [1987, p.23-36, rus] 41-3399
- Non-destructive control method for studying thixotropic changes in clayey grounds. Voznesenskiy, E.A., et al, [1987, p.80-94, rus] 41-3400
- Clay soils**
- Shallow building foundations on discontinuous permafrost. Fedorov, V.I., et al, [1985, p.15-16, rus] 41-280
- Foundationless low-rise buildings for structurally unstable ground. Abramov, V.E., [1985, p.18-19, rus] 41-282
- Estimating the frost heave of clays according to swelling. Orlov, V.O., et al, [1985, p.76-78, rus] 41-312
- Building pile foundations in water-saturated silty clay grounds. Vorontsov, G.I., et al, [1986, p.8-10, rus] 41-878
- Particle size distribution in patterned ground, Niwot Ridge, Colorado. Rissing, J.M., et al, [1985, p.153-163, eng] 41-1226
- Thermal and moisture regimes of clay soils in aeration zones of construction sites in the Far East and the prevention of flooding. Fedorov, V.I., [1985, p.93-104, rus] 41-1364
- Some characteristics of unsaturated clay during freezing. Chen, X., et al, [1986, p.209-216, chi] 41-1417
- Influence of moisture condition on frost heave in clay. Xu, B., et al, [1986, p.217-222, chi] 41-1418
- Sagging of thawing clayey grounds of different consistency. Khrustalev, L.N., et al, [1986, p.169-172, rus] 41-2097
- Water freezing and ice melting in fine-grained rocks. Ershov, E.D., [1986, p.53-66, rus] 41-2540
- Organic soils. Rubinshtein, A.I.A., [1986, 89p., rus] 41-2729
- Construction properties of gley clayey ground. Popov, A.F., [1986, p.16-22, rus] 41-3393
- Non-destructive control method for studying thixotropic changes in clayey grounds. Voznesenskiy, E.A., et al, [1987, p.80-94, rus] 41-3400
- Thermal properties of cryogenic meadow-chernozem soils. Kulikov, A.I., [1984, p.126-130, rus] 41-4090
- Clays**
- Construction of foundations of low-rise buildings and structures on sagging ground. Koroteev, D.V., [1986, 155p. (pertinent p. 80-135), rus] 41-784
- Design of tall railroad embankments on weak bases. Vol'nov, M.V., et al, [1986, p.5-6, rus] 41-1530
- Modified method for intensive dynamic compaction of weak soils. Marinescu, K., [1986, p.73-78, eng] 41-1851
- Bound water and ice transformations in rock and ground systems. Ershov, E.D., [1986, p.8-18, rus] 41-2081
- Formation of segregated ice and frost heave of clays. Zamolotchkova, S.A., [1986, p.127-136, rus] 41-2093
- Experimental studies of injected ice formation in fine-grained rocks. Ershov, E.D., et al, [1986, p.136-149, rus] 41-2094
- Permafrost formation in littoral and sublittoral zones of northern Eurasia. Maslov, A.D., [1986, p.79-85, rus] 41-2539
- Composition and behavior of sand-clay soils under vibration. Ostrovskaya, O.V., [1986, p.108-111, rus] 41-2542
- Examples of studying landslide processes in Canada. Rechitskiy, V.I., [1986, p.96-104, rus] 41-2548
- Regularities governing the salinity of frozen marine deposits. Dubikov, G.I., [1986, p.14-27, rus] 41-2815
- Relationship of composition and behavior of sandy-clayey soils upon vibration. Ostrovskaya, O.V., [1986, p.112-115, eng] 41-3018
- Seismo-acoustic studies of frozen and thawed calcareous clays. Voronkov, O.K., et al, [1985, p.88-95, rus] 41-3129
- Peat formation of the Rutor Glacier (Aosta Valley). Results obtained by palynostratigraphic study of new peat outcrops near the glacier snout. Armando, E., et al, [1985, p.144-149, ita] 41-3182
- Cyclic swelling of clays. Osipov, V.I., et al, [1987, p.23-36, rus] 41-3399
- Experience in studying thermal properties of ground. Zaitsev, V.S., [1986, p.115-118, rus] 41-4466
- Climate**
- Climate at Mawson. Guo, S., et al, [1984, p.41-58, chi] 41-266
- Snow and ice in Earth's environment. Kotliakov, V.M., [1986, 157p., rus] 41-698
- Recent changes in the glaciers of Heard Island. Allison, I.F., et al, [1986, p.255-271, eng] 41-1020
- Antarctic climate research, No.1. [1986, 31p., eng] 41-1071
- USARP automatic weather station project. Stearns, C.R., [1986, p.5-12, eng] 41-1072
- Review of the history of atmospheric CO2 recorded in ice cores. Oeschger, H., et al, [1986, p.89-108, eng] 41-2221
- Eriophorum vaginatum* annual and latitudinal growth variation. Shaver, G.R., et al, [1986, p.1524-1535, eng] 41-2480
- Floating ice shelves related to ice age climates. Denton, G.H., et al, [1986, p.509-513, eng] 41-2801
- Atlas of the polar regions. [1985, 66p., eng] 41-2884
- Geocryology of the Schirmacher Hills. Vitiurin, B.I., [1986, p.200-212, eng] 41-3200
- Comparison of Northern Hemisphere snow cover data sets. Scialdone, J., et al, [1987, p.53-68, eng] 41-3341
- Antarctic ice and rocks. Doake, C.S.M., [1987, p.138-189, eng] 41-3532
- Date of break-up of lake ice as a climate index. Ruostenoja, K., [1986, p.89-99, eng] 41-3758
- Climatic atlas, including freezing precipitation. [1987, 3p. + 108p. of maps, eng] 41-4522
- Wave climate study, northern coast of British Columbia. [1987, 93p., eng] 41-4510
- Climatic changes**
- Climatic reconstructions from geocryological data. Danilov, I.D., et al, [1986, p.61-65, rus] 41-106
- Climatic cycles as reflected in ice conditions of northern seas. Girdiuk, G.V., et al, [1986, p.122-127, rus] 41-119
- Glacioclimatic conditions in the European Arctic in the Late Holocene. Surova, T.G., et al, [1986, p.149-154, rus] 41-124
- Ross Ice Shelf oxygen isotopes and west antarctic climate history. Grootes, P.M., et al, [1991, p.49-67, eng] 41-612
- Climatic variation and runoff in the Arctic glaciers. Collins, D.N., [1984, p.127-145, eng] 41-630
- Arctic ice shelf growth, fiord oceanography and climate. Jeffries, M.O., et al, [1984, p.147-153, eng] 41-631
- Response time of glaciers in Iceland to changes in climate. Johannesson, T., [1986, p.100-101, eng] 41-748
- Mass balance and trends in glacier changes in the USSR. Akbarov, A.A., et al, [1986, p.43-59, rus] 41-775
- Changes in glacial runoff of Central Asian rivers in relation to possible climatic variations. Glazyrin, G.E., et al, [1986, p.59-70, rus] 41-776
- West Antarctic ice sheet dynamics. Van der Veen, C.J., [1985, p.732-734, eng] 41-983
- Calculating basic characteristics of mountain glaciers under climatic changes. Glazyrin, G.E., [1986, p.44-47, 173-175, eng] 41-1053
- Influence of large-scale atmospheric processes on the fluctuations of glaciers. Denisova, T.I.A., et al, [1986, p.52-58, 179-185, eng] 41-1055
- New Zealand glaciers. Fitzharris, B.B., et al, [1986, p.84-89, 206-208, eng] 41-1058
- Fluctuations of Heard Island glaciers and related climatic changes. Allison, A., et al, [1986, p.89-95, 209-214, eng] 41-1059
- Permafrost thermal properties in the Alaskan Arctic. Lachenbruch, A.H., et al, [1986, p.689-696, eng] 41-1254
- Recent trends in the potential role of seasonal snow cover in the CO2 induced climate change. Li, P., [1986, p.176-178, chi] 41-1466
- Compiling dendroclimatograms for distinguishing glaciation conditions. Solomina, O.N., [1986, p.106-112, rus] 41-1648
- Polar ice sheets: a wild card in the deck. Jacobs, S.S., [1986, p.50-54, eng] 41-1900
- Possible CO2-induced warming effects on the cryosphere. Barry, R.G., [1984, p.571-604, eng] 41-1973
- Climatic belts in the case of a unipolar glaciation. Flohn, H., [1984, p.609-620, eng] 41-1974
- Climatic changes on a yearly to millennial basis. [1984, 667p., eng] 41-2005
- Peat inception and climatic change in northern Quebec. Payette, S., [1984, p.173-179, eng] 41-2006
- Climate and glaciation in Kong Karls Land, eastern Svalbard. Holmgren, B., et al, [1984, p.291-302, eng] 41-2007
- Climatic fluctuations and the peculiarities of Holocene permafrost development in the USSR. Makimova, L.N., et al, [1986, p.45-58, rus] 41-2085
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskiy, M.I.A., et al, [1986, 133p., rus] 41-2253
- Climate simulation and change: a simple energy balance climate model. Goldenberg, S.D., [1985, 212p., eng] 41-2579
- Ice core study of antarctic climatic history. Mayewski, P.A., et al, [1985, p.71-72, eng] 41-2631
- Baffin Bay environmental change during last interglacial/glacial transition. Andrews, J.T., et al, [1985, p.333-355, eng] 41-2682
- Diatoms beneath the Greenland ice and climatic changes. Harwood, D.M., [1986, p.304-308, eng] 41-2688
- Climatic warming and basal melting of large ice sheets. Saari, M.R., et al, [1987, p.33-36, eng] 41-2947
- Glacial and climatic fluctuations during the last century in the Mont Blanc and Monte Rosa groups. Cerutti, A.V., [1985, p.124-136, ita] 41-3180
- Dynamics of the West Antarctic Ice Sheet. Van der Veen, C.J., ed, [1987, 368p., eng] 41-3271
- West Antarctic Ice Sheet: the need to understand its dynamics. Van der Veen, C.J., [1987, p.1-16, eng] 41-3272
- Modelling the response of the West Antarctic Ice Sheet to a climatic warming. Budd, W.F., et al, [1987, p.321-358, eng] 41-3287
- Effect of climate fluctuations on selected cryospheric parameters. Da Silva, C.P., [1984, 27p., eng] 41-3421
- On the use of lake ice conditions to monitor climatic change. Anderson, J.C., [1987, 28p. + appendix, eng] 41-3424
- Investigation of permafrost and climate change. [1986, var.p., eng] 41-3506
- Impact of present century climate fluctuations in the Northern Hemisphere. Wallén, C.C., [1986, p.245-278, eng] 41-3559
- Mikkaglaciären: bed topography and response to 20th century climate change. Holmlund, P., [1986, p.291-302, eng] 41-3561
- Climatic reconstructions from geocryological data. Danilov, I.D., et al, [1986, p.303-308, eng] 41-3621
- Dendrochronologies of San Rafael and Soler areas, Patagonia. Sweda, T., et al, [1987, p.125-132, eng] 41-3837
- Model of the ice age cycle. Hyde, W.T., et al, [1987, p.1351-1374, eng] 41-4053
- Modelling of continental and sea ice as part of climate models. Nagurny, A.P., [1986, 104p., rus] 41-4092
- Ice sheets and the CO2 problem. Van der Veen, C.J., [1987, p.1-42, eng] 41-4136
- Variations in mountain river runoff related to climatic changes. Semenov, V.A., et al, [1986, p.78-82, 191-195, rus] 41-4345
- Climatic factors**
- Thermal properties of sandur and tundra regions due to weather conditions. Joly, D., [1985, p.95-101, fre] 41-376
- Global ice-sheet system interlocked by sea level. Denton, G.H., et al, [1986, p.3-26, eng] 41-611
- Winter highway construction. Bennett, F.L., [1986, p.32-46, eng] 41-642
- Snow cover and weather conditions. Schaffhauser, H., [1984, p.205-224, ger] 41-715
- Pollen, vegetation and climatic relationships along the Dalton Highway, Alaska. Short, S.K., et al, [1986, p.57-72, eng] 41-1188
- Winter precipitation in central New Brunswick, Canada. Palmer, D.C., [1985, p.230-236, eng] 41-1498
- Impact of climate on grass growth, Iceland. Ogilvie, A.E.J., [1984, p.343-352, eng] 41-2008
- Effects of climate on combat in European Russia. [1986, 80p. + graphs, eng] 41-2063
- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). [1986, 126p., rus] 41-2213
- General viewpoints on hydrocarbon developments in northern regions. Howard, M.W., [1986, p.317-323, eng] 41-2282
- Atmospheric modelling and air-sea-ice interaction. Herman, G.F., [1986, p.713-754, eng] 41-2997
- Present trend of the glaciers of the Italian Alps. Zanon, G., [1985, p.89-96, ita] 41-3178
- Summer climate of the Northern Patagonia Icefield. Inoue, J., et al, [1987, p.7-14, eng] 41-3822



**Climatic factors (cont.)**

- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol. I. [1986, 166p., rus] **41-3982**
- Permafrost distribution in central Canada: applications of a climate-based predictive model. Nelson, F.E., [1986, p.550-569, eng] **41-4137**
- Glacier mass balance, SE Alaska and NW British Columbia. Pelto, M.S., [1987, p.189-194, eng] **41-4456**

**Climatology**

- 72-year Lake Michigan region snow climatology. Duney, M.J., et al, [1982, p.45-48, eng] **41-2**
- Ice conditions, Canadian east coast, using remote sensing data. Walker, A.E., [1986, p.537-545, eng] **41-164**
- Bibliography of alpine and subalpine years of the Front Range, Colorado. Halfpenny, J.C., comp. [1986, 114p., eng] **41-697**
- Great Lakes climatological atlas. Saulesleja, A., ed. [1986, 143p., eng] **41-1577**
- Climatic handbook for Glacier National Park. Finklin, A.I., [1986, 124p., eng] **41-2183**
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitski, M.I.A., et al, [1986, 133p., rus] **41-2253**
- Weather extremes. Schmidli, R.J., [1981, 15p., eng] **41-2529**
- Seasonal variation of snowline in Langtang Valley, Nepal Himalayas, 1985-1986. Morinaga, Y., et al, [1987, p.49-63, eng] **41-3915**
- Climate of Antarctica. Papers presented at the All-Union Symposium on the Study of the Climate of Antarctica. Dolgin, I.M., ed, [1986, 213p., eng] **41-3948**
- Modelling of continental and sea ice as part of climate models. Nagurnyi, A.P., [1986, 104p., rus] **41-4092**
- See also: Microclimatology; Paleoclimatology

**Clothing**

- Cold weather clothing. Wojtaszek, R., [1986, p.349-354, eng] **41-940**

**Cloud chambers**

- Ice crystal growth in a supercooled cloud tunnel. Fukuta, N., et al, [1982, p.325-328, eng] **41-25**
- Cloud tunnel study on snowflake riming and ice crystal capture by cloud drops. Lew, J.K., [1986, 346p., eng] **41-2643**

**Cloud cover**

- Cloud/cryosphere interactions in the marginal snow and ice zones. Barry, R.G., [1984, p.605-607, eng] **41-2009**

- Effect of orographic shadowing on satellite imagery of snow and ice. McGuffie, K., et al, [1986, p.1359-1365, eng] **41-2140**

- Arctic stratus clouds. Herman, G.F., [1986, p.465-488, eng] **41-2992**

- Airborne measurements of the antarctic cloud water acidity. Saxena, V.K., et al, [1985, p.201-203, eng] **41-3323**

- Planet Venus. Kondrat'ev, K.I.A., et al, [1987, 278p., rus] **41-3689**

- Comparison between Landsat cloud images and precipitation radar echoes. Endoh, T., et al, [1986, p.121-131, jpn] **41-3885**

**Cloud dissipation**

- Forecasting fog dissipation time and visibility improvement with stratus conditions. Koshelenko, I.V., [1986, p.50-58, rus] **41-2637**

**Cloud droplets**

- Simple model of stratified precipitation for scavenging studies. Molenkamp, C.R., [1982, p.63-65, eng] **41-5**

- Case studies of ice distribution in hurricanes. Black, R.A., et al, [1982, p.335-337, eng] **41-28**

- Field evidence of summer convective processes on the Texas South Plains. Jurica, G.M., et al, [1982, p.354-357, eng] **41-33**

- Spectra and liquid water content in aircraft icing environments. Glass, M., [1982, p.400-403, eng] **41-43**

- Liquid water and drop size in supercooled clouds. Jeck, R.K., [1982, p.408-411, eng] **41-45**

- Cloud particles near melting layer. Kropfli, R.A., et al, [1982, p.412-415, eng] **41-46**

- Hailstone growth and various microphysical parameters. Foster, M.P., et al, [1982, p.438-441, eng] **41-52**

- New clues for decoding hailstone structure. Pfau, J.C., et al, [1982, p.446-449, eng] **41-54**

- Analysis and research of hailstone micro-structure. Wang, A.S., et al, [1982, p.450-452, eng] **41-55**

- Subcooled liquid clouds from mountaintop observations. Hindman, E.E., et al, [1982, p.491-494, eng] **41-65**

- Mechanical properties of atmospheric ice. Druetz, J., et al, [1986, p.67-74, eng] **41-1305**

- Cloud tunnel study on snowflake riming and ice crystal capture by cloud drops. Lew, J.K., [1986, 346p., eng] **41-2643**

- Freezing of cloud droplets at low moisture and pressure. Burchuladze, N.N., et al, [1986, p.20-31, rus] **41-3463**

- Influence of electric fields on freezing of supercooled water drops. Shlykov, V.V., [1986, p.32-40, rus] **41-3464**

- Quantitative prediction of secondary ice production rates. Harris-Hobbs, R.L., et al, [1987, p.1071-1082, eng] **41-3852**

- Cloud riming regions for snow crystals that impact mountain tops in the Colorado Rockies. Hindman, E.E., [1984, p.67-70, eng] **41-4373**

- Formation of frozen drops, conglomerates, and graupel. Parungo, F.P., et al, [1984, p.103-105, eng] **41-4378**

- Regional characteristics of graupel formation. Harimaya, T., [1984, p.167-168, eng] **41-4383**

- Aerodynamic conditions of ice crystal growth by aggregation and droplet deposition. Podzimek, J., [1984, p.173-176, eng] **41-4385**

- Coalescence kinetic equations for cloud droplets and ice particles. Yenukashvili, I.M., [1984, p.247-248, eng] **41-4393**

- Frozen drop embryos in Alberta hailstorms and their origins. English, M., et al, [1984, p.253-255, eng] **41-4394**

- Cloud physics. Extended summaries from Conference on Cloud Physics, 1982, 587p., eng] **41-1**

- Aircraft observations of large scale cloud systems. Cohen, I.D., [1982, p.203-206, eng] **41-16**

- Precipitation near the top of a maritime convective cloud. Willis, P.T., et al, [1982, p.211-214, eng] **41-18**

- Ice evolution versus precipitation in the Duero Basin. Vali, G., et al, [1982, p.218-221, eng] **41-20**

- Experimental and theoretical studies of ice crystal habit development. Fukuta, N., et al, [1982, p.329-332, eng] **41-26**

- Ice crystal and ice nucleus measurements in cap clouds. Vali, G., et al, [1982, p.333-334, eng] **41-27**

- Ice crystal production in cumulus. Cerni, T.A., [1982, p.346-349, eng] **41-31**

- Field evidence of summer convective processes on the Texas South Plains. Jurica, G.M., et al, [1982, p.354-357, eng] **41-33**

- Sensitivity to cloud microphysical processes. Cotton, W.R., et al, [1982, p.358-361, eng] **41-34**

- Graupel characteristics in relation to the dynamics of Florida cumuli. Walsh, P.A., et al, [1982, p.362-365, eng] **41-35**

- Microphysical processes in supercooled cumuli. Xu, J.-L., et al, [1982, p.370-373, eng] **41-37**

- Glaciating of Montana and Florida summer cumuli. Lamb, D., et al, [1982, p.374-377, eng] **41-38**

- Microphysical influences on aircraft icing. Politovich, M.K., [1982, p.420-422, eng] **41-47**

- Analysis and research of hailstone micro-structure. Wang, A.S., et al, [1982, p.450-452, eng] **41-55**

- Ice crystal concentration in orographic clouds. Grant, L.O., et al, [1982, p.584-587, eng] **41-71**

- Helicopter Icing Spray System (HISS) evaluation and improvements. Belte, D., et al, [1986, 148p., eng] **41-454**

- Interaction of clouds with the surrounding aerosol medium. Mazin, I.P., [1982, p.42-48, eng] **41-1006**

- Effect of ions on cloud condensation and ice nucleation. Singh, N., et al, [1985, p.343-350, eng] **41-2242**

- Numerical modeling of optical features of falling snow. Martinez-Sanchez, M., et al, [1983, p.78-85, eng] **41-2314**

- Characteristics of Arctic polar stratospheric clouds. Kent, G.S., et al, [1986, p.2149-2161, eng] **41-2550**

- Cloud physics of weather modification, pts. 1 and 2. Braham, R.R., Jr., [1986, p.215-222, 308-315, eng] **41-3137**

- Thermal device for aircraft measurement of the solid water content of clouds. King, W.D., et al, [1986, p.356-362, eng] **41-3220**

- Lidar-radiometric method for determining the ice water content of cirrus clouds. Zhuravleva, V.A., et al, [1986, p.32-38, eng] **41-3251**

- Freezing of cloud droplets at low moisture and pressure. Burchuladze, N.N., et al, [1986, p.20-31, rus] **41-3463**

- Influence of electric fields on freezing of supercooled water drops. Shlykov, V.V., [1986, p.32-40, rus] **41-3464**

- Problems of cloud physics. Voloshchuk, N.I., ed, [1986, 249p., rus] **41-3669**

- Numerical simulation of the evolution of seeded supercooled stratiform clouds. Bakhanov, V.P., et al, [1986, p.26-41, rus] **41-3670**

- Shape and size distributions of hailstones. Wang, P.K., et al, [1987, p.1062-1070, eng] **41-3851**

- Winter cloud seeding in Bridger Mountain Range, Montana. Super, A.B., [1986, p.1926-1933, eng] **41-4057**

- International Cloud Physics Conference, 9th, Tallinn, 1984. [1984, 3 vols. (835p.), eng] **41-4369**

- Ice particles in marine and continental clouds. Hobbs, P.V., et al, [1984, p.71-72, eng] **41-4374**

- On the microstructure and ice water content of high clouds. Kosarev, A.L., et al, [1984, p.73-76, eng] **41-4375**

- Snow production in a convective cloud. Wakahama, G., et al, [1984, p.113-116, eng] **41-4379**

- Ice crystal growth in temperature-ice supersaturation field. Wang, A.S., [1984, p.179-182, eng] **41-4387**

- Ice crystal growth at different temperature and ice supersaturation. Wang, A.S., et al, [1984, p.183-186, eng] **41-4388**

- Kinetics of ice crystal formation in "dynamic" cloud conditions. DeMott, P.J., et al, [1984, p.189-190, eng] **41-4389**

- Development of ice crystal concentrations in stably stratified orographic cloud systems. DeMott, P.J., et al, [1984, p.191-194, eng] **41-4390**

- Secondary ice multiplication by "splintering" in low stratocumulus clouds. Duroure, C., et al, [1984, p.195-198, eng] **41-4391**

- Secondary ice particle production by rime fragmentation and crystal breakup. Griggs, D.J., et al, [1984, p.199-202, eng] **41-4392**

- Microphysical origin of graupel and hail. Fukuta, N., et al, [1984, p.257-260, eng] **41-4395**

- Numerical modelling of hail to rain conversion. Joe, P., et al, [1984, p.261-265, eng] **41-4396**

- Wet growth and structure of hailstones. Knight, N.C., et al, [1984, p.267-269, eng] **41-4397**

- Role of low density riming growth in hail production. Farley, R.D., [1984, p.489-492, eng] **41-4404**

- Numerical model of hailstone growth. Geresdi, I., et al, [1984, p.493-496, eng] **41-4405**

- Numerical simulation of an Alberta hailstorm. Yau, H.K., et al, [1984, p.585-588, eng] **41-4407**

- Effects of topographic variations on the generation of aggregate snowflakes. Cotton, W.R., et al, [1984, p.613-616, eng] **41-4409**

- Numerical model of stratiform cloud. Hu, Z., et al, [1984, p.617-619, eng] **41-4410**

- Dynamics, microphysics, radiation and ice phase in clouds and fog. Khvorostianov, V.I., et al, [1984, p.625-628, eng] **41-4411**

- Artificial crystallization zones. Kudriavtseva, S.K., et al, [1984, p.719-722, eng] **41-4413**

- Icing of cylinders in a wind tunnel. Bain, M., et al, [1984, p.733-736, eng] **41-4414**

- Wintertime, supercooled cloud variables up to 3 km a.g.l. Jeck, R.K., [1984, p.741-744, eng] **41-4416**

- Dual polarisation radar measurements of the evolution of ice in clouds. Illingworth, A.J., et al, [1984, p.787-790, eng] **41-4418**

- Microphysical interpretation of radar polarization measurements. Jameson, A.R., [1984, p.791-792, eng] **41-4419**

- Cloud water freezing accompanied by electrocrystallization potentials. Kolev, S., et al, [1984, p.793-796, eng] **41-4420**

- Orographic cloud microphysical observations with a microwave radiometer. Sassen, K., [1984, p.801-804, eng] **41-4421**

- Examination of double-plate ice crystals and the initiation of precipitation in continental cumulus clouds. Bruintjes, R.T., et al, [1987, p.1331-1349, eng] **41-4424**

- Cloud seeding. Seeding of stratus and nimbostratus clouds. Hirsch, J.H., et al, [1982, p.222-225, eng] **41-21**

- Orographic layer cloud structure. Sassen, K., [1982, p.318-321, eng] **41-23**

- Analysis of silver in individual ice particles after cloud seeding. Nagamoto, C., et al, [1982, p.378-380, eng] **41-39**

- Use of ground smoke-generators in mountains. Laktionov, A.G., [1982, p.68-73, eng] **41-1007**

- Cloud physics and modification. Zabolotskaia, T.N., ed, [1986, 113p., rus] **41-1447**

- Additional precipitation by seeding stratiform clouds. Khaid, S.V., [1986, p.27-31, rus] **41-1448**

- Possibilities of dispersing supercooled stratiform clouds and fog of large vertical extension. Voronov, G.S., [1986, p.31-43, rus] **41-1449**

- Improved sampler PLIAS-2 for capturing ice-forming nuclei on membrane filters. Silaev, A.V., et al, [1986, p.76-80, rus] **41-1450**

- Using equipment designed for the "Selena-1" filters in studying natural and artificial ice-forming nuclei. Silaev, A.V., et al, [1986, p.80-85, rus] **41-1451**

- Structural anomalies in ice-forming silver iodide aerosols. Borovoi, N.A., et al, [1986, p.97-99, rus] **41-1454**

- Computerized simulation of artificial seeding of clouds containing ice crystals. Burkov, M.V., et al, [1986, p.3-16, rus] **41-1555**

- Heterogeneous nucleation of ice on aerosol nuclei with modified surfaces. Bazaev, T.V., et al, [1986, p.119-128, rus] **41-1903**

- Cloud physics of weather modification, pts. 1 and 2. Braham, R.R., Jr., [1986, p.215-222, 308-315, eng] **41-3137**

- Studies of ice-forming properties of phloroglucinol under field conditions. Gromova, T.N., et al, [1986, p.116-123, rus] **41-3465**

- Problems of cloud physics. Voloshchuk, N.I., ed, [1986, 249p., rus] **41-3669**

- Numerical simulation of the evolution of seeded supercooled stratiform clouds. Bakhanov, V.P., et al, [1986, p.26-41, rus] **41-3670**

- Winter cloud seeding in Bridger Mountain Range, Montana. Super, A.B., [1986, p.1926-1933, eng] **41-4057**

- Numerical modeling of hailstorms and hailstone growth. Farley, R.D., et al., [1986, p.2014-2035, eng] 41-4059
- Geographic winter storm structure in California. Marwitz, J.D., [1984, p.315-316, eng] 41-4403
- Model of the orographic enhancement of snowfall. Choulaton, T.W., et al., [1984, p.609-611, eng] 41-4408
- Precipitation initiation through cloud seeding. English, M., et al., [1984, p.707-710, eng] 41-4412
- Artificial crystallization zones. Kudryavtseva, S.K., et al., [1984, p.719-722, eng] 41-4413
- Passive-active radar sounding of convective clouds. Bobylev, L.P., et al., [1984, p.769-772, eng] 41-4417
- See also: Artificial precipitation; Cloud dissipation; Weather modification
- Cloud seeding generators**
- See: Smoke generators
- Clouds (meteorology)**
- Formation of polar stratospheric clouds. Steele, H.M., et al., [1983, p.2055-2067, eng] 41-2004
- Obscuration by helicopter-produced snow clouds. Ebersole, J.F., [1983, p.94-99, eng] 41-2317
- Coalescence-freezing precipitation mechanism. Braham, R.R., Jr., [1986, p.142-145, eng] 41-3752
- See also: Supercooled clouds
- Coal**
- Peculiarities of rock pressure development in mining excavations when the roof is a difficultly caving permafrost. Popov, S.F., [1985, p.93-97, rus] 41-195
- Control of thermal regime during mine excavation in permafrost. Manicheva, O.M., [1985, p.144-146, rus] 41-196
- Using snow for dust control in northern mines. Osodoev, M.T., et al., [1986, p.193-196, rus] 41-2177
- Impact of ejecta from coal-fueled power plants on paludal north-taiga pine forests. Alekseev, V.A., et al., [1986, p.664-672, rus] 41-2562
- Dust control in coal quarries at subzero temperatures. Kupin, A.N., et al., [1985, p.153-154, rus] 41-2774
- Comparative efficiency of coal transportation by railroad and by hydraulic pipelines. Fainvetla, V.I.A., et al., [1986, p.22-24, rus] 41-2783
- Transportation in regions of new economic development. Prokofeva, T.A., et al., [1986, 208p., rus] 41-3663
- Improving the reliability of 204M excavators under northern conditions. Osipova, T.V., et al., [1986, p.11-16, rus] 41-4525
- Reciprocal influence of underground and open mining under permafrost conditions. Los', I.N., [1986, p.33-37, rus] 41-4553
- Coalescence**
- Coalescence-freezing precipitation mechanism. Braham, R.R., Jr., [1986, p.142-145, eng] 41-3752
- Coalescence kinetic equations for cloud droplets and ice particles. Yenukashvili, I.M., [1984, p.247-248, eng] 41-4393
- Coastal topographic features**
- Problems of studying sediment balance in coastal zones of seas. Shulskii, I.U.D., [1986, 240p., rus] 41-516
- Geomorphology of river deltas on the Arctic coast of Siberia. Korotayev, V.N., [1986, p.139-147, eng] 41-2340
- Canadian inland seas. Martini, I.P., ed, [1986, 494p., eng] 41-2591
- Coastal features of Canadian inland seas. Martini, I.P., [1986, p.117-142, eng] 41-2594
- Cryogenic-inversion ridges of northwestern Siberia. Bolikhovskii, V.F., et al., [1986, p.128-132, rus] 41-2829
- Collapsed glacial topography at Adams Inlet, Alaska. McKenzie, G.D., et al., [1987, p.55-59, eng] 41-3596
- See also: Shoreline modification
- Coasts**
- See: Shores
- Coatings**
- Low adhesion coatings for sea spray icing on offshore structures. Sackinger, W.M., et al., [1986, p.512-527, eng] 41-1116
- Field measurements of the adhesion strength of ice. Makkonen, L., et al., [1986, p.725-734, eng] 41-1128
- Frost-resistant coated optical fibres. Abramov, A.A., et al., [1985, p.805-807, eng] 41-1411
- See also: Protective coatings
- Codes**
- See: Building codes; Standards
- Cohesion**
- Building thawed-earth dams in northern climatic zone. Shatygin, V.A., [1986, p.80-83, rus] 41-2754
- Snow accumulation on a narrow board. Kobayashi, D., [1987, p.239-245, eng] 41-3035
- Artificial freezing of cohesive soils for preventing adhesion. Mochalov, V.I., et al., [1986, p.15-17, rus] 41-3768
- Cold chambers**
- Alaska testlab: helping contractors avoid costly mistakes. [1984, p.36-40, eng] 41-1330
- Small-volume fog chamber with automatic recording of ice crystals. Gorbunov, B.Z., et al., [1986, p.248-249, eng] 41-3161
- New horizontal gradient, continuous flow, ice thermal diffusion chamber. Tomlinson, E.M., et al., [1985, p.448-467, eng] 41-3216
- On the snow crystals of cold temperature types. Kikuchi, K., et al., [1984, p.169-172, eng] 41-4384
- Ice crystal growth in temperature-ice supersaturation field. Wang, A.S., [1984, p.179-182, eng] 41-4387
- Cold exposure**
- Problems of chemical defense operations in extreme cold. Stearman, R.L., [1985, 46p. + 2 appends., eng] 41-477
- Huurre expedition to the North Pole in 1984. Nordlund, O.P., ed, [1987, 52p., eng] 41-3368
- Starting an arterial heat pipe from frozen state. Abramenko, A.N., et al., [1987, p.1283-1288, eng] 41-4161
- Cold storage**
- Storage of vegetables by the use of snow. Muramatsu, K., [1986, p.149-157, jpn] 41-1219
- Low-temperature service facilities and recent status of their materials and welding. Saiga, Y., et al., [1986, p.1-21, eng] 41-3785
- Cold stress**
- Effect of cold weather on productivity. Abele, G., [1986, p.61-66, eng] 41-409
- Elastoplastic deformation of steel at low temperatures. Zhigalkin, V.M., et al., [1986, p.129-141, rus] 41-1017
- Conditions of cold resistance and durability of structural elements in the North. Lyglav, A.V., [1985, p.83-90, rus] 41-2851
- Calculating frost resistance of structural elements. Kuz'min, V.R., [1985, p.95-102, rus] 41-2852
- Cold tolerance**
- New materials for sub-arctic and arctic offshore structures. Itoh, K., et al., [1986, p.833-968, eng] 41-1135
- Corrosion resistance steels for low-temperature construction. Itoh, K., et al., [1986, p.869-896, eng] 41-1136
- Material selection and fabrication recommendations for arctic offshore structures. Lohne, P.W., [1986, p.897-910, eng] 41-1137
- Phytomass of Venezuelan paramo vegetation. Smith, J.M.B., et al., [1985, p.189-198, eng] 41-1229
- Environmental factors and growth of *Dryas octopetala*, Alaska. McGraw, J.B., [1985, p.229-239, eng] 41-1244
- Patterns of High Arctic saxifragas. Grulke, N.E., et al., [1985, p.241-250, eng] 41-1245
- Ephemeral plants in treeline areas, Western U.S.A. Jackson, L.E., [1985, p.251-260, eng] 41-1246
- Turf-banked terraces in the Olympic Mountains, Washington, U.S.A. Hansen-Bristow, K.J., et al., [1985, p.261-270, eng] 41-1247
- Balsam poplar in northern Alaska. Edwards, M.E., et al., [1985, p.271-277, eng] 41-1248
- Primary production in the Bratsk reservoir. Part 2. Assimilation of carbon by phytoplankton. Pautova, V.N., et al., [1986, p.50-58, rus] 41-1834
- Freezing tolerance of Douglas fir in the inland Northwest. Rehfeldt, G.E., [1986, 5p., eng] 41-2185
- Development of heavy thick HT80 steel plates for racks of jack-up rigs. Okano, S., et al., [1987, p.B-14, eng] 41-3940
- See also: Acclimatization
- Cold weather concreting**
- See: Winter concreting
- Cold weather construction**
- Explosion welding of a large diameter gas transmission pipeline. Justice, J.T., et al., [1986, p.1-13, eng] 41-77
- Air-flow windows for the Arctic and sub-Arctic. Neff, P.W., [1986, 54p., eng] 41-250
- House for a cold city. Ross, J.F., [1985, p.20-24, eng] 41-336
- Cold region structural engineering. Eranti, E., et al., [1986, 529p., eng] 41-338
- Effect of cold weather on productivity. Abele, G., [1986, p.61-66, eng] 41-409
- USSR energy atlas. [1985, 79p., eng] 41-480
- Foundations built of dry cemented earth mixtures. Kosenko, A.A., [1985, p.4-5, rus] 41-506
- Hydromechanization in construction of electric power plants. Shkundin, B.M., [1986, 224p. (pertinent p.156-174), rus] 41-619
- Winter highway construction. Bennett, F.L., [1986, p.32-46, eng] 41-642
- Structural monitoring concepts for arctic pipelines. Nyman, K.J., et al., [1986, p.47-66, eng] 41-643
- Arctic and subarctic construction: general provisions. Lobacz, E.F., [1986, 75p., eng] 41-663
- Engineering surveys along the Trans-Alaska Pipeline. Godfrey, R.N., et al., [1986, 85p., eng] 41-799
- Building construction in cold climates. Minion, R., comp., [1985, 79p., eng] 41-824
- Canyon Creek bridge. Carlson, L., et al., [1986, p.43-47, eng] 41-827
- Polyethylene-modified bitumen for paving applications. Jew, P., et al., [1986, p.2685-2704, eng] 41-829
- Structural hollow sections and PE-coated steel pipes in the Arctic. Soininen, R., [1986, p.970-987, eng] 41-1141
- Effects of cold environment on rapid runway repairs. Abele, G., [1986, p.1-9, eng] 41-1355
- Shelters provide bad-weather protection, secure construction progress. [1986, p.1424-1429, ger] 41-1563
- Development of prefabricated metal buildings for cold environment. Sakai, M., et al., [1985, p.20-29, eng] 41-1572
- Calculation of optimal work time for polar conditions. Mustova, M.M., [1986, p.50-51, rus] 41-1890
- Road technology in cold regions of North America. Eorola, M., [1984, p.402-406, fin] 41-1938
- Road construction in Western Siberia. Segerkrantz, V., [1984, p.408-411, fin] 41-1939
- Scandinavian report. [1983, p.S1-S16, eng] 41-2226
- Cryogenic deformations in reclaimed lands of the Khanka plain. Ral'ko, V.D., [1986, p.160-162, rus] 41-2251
- Proposed standard specification for cold weather concreting (ACI 306.1). Carino, N.J., et al., [1986, p.1043-1047, eng] 41-2473
- Polymer concrete mix takes to cold weather. Crichton, W., [1987, p.32, eng] 41-2525
- Energy-saving techniques for winter works. Zhufko, P.A., [1986, p.18-20, rus] 41-2557
- Building thawed-earth dams in northern climatic zone. Shatygin, V.A., [1986, p.80-83, rus] 41-2754
- Inadequate norms concerning the increase of winter earthwork costs. Myznikov, I.U.N., [1987, p.41-44, rus] 41-2799
- Baykal-Amur line—a railroad discloses Siberia. Karger, A., [1985, p.38-48, ger] 41-3077
- Unforgiving North. Chill, R.W.C., et al., [1985, p.157-164, eng] 41-3191
- Calculating the non-erosive velocity of a stream for sandy ground in freezing weather. Skrebkov, G.P., et al., [1986, p.74-77, rus] 41-3260
- State-of-the-art report on offshore concrete structures for the Arctic. [1986, 117p., eng] 41-3787
- Use of high float emulsion asphalt in Alaska (Report to the Legislature). Connor, B., [1985, cl2p., eng] 41-4001
- Paving in cold areas. [1987, 1027p. (2 vols.), eng] 41-4019
- Selection of paving asphalt cements for low temperature service. Robertson, W.D., [1987, p.41-82, eng] 41-4021
- Paving asphalt temperature susceptibility. McLeod, N.W., [1987, p.147-240, eng] 41-4024
- Bituminous surface treatments in northern Canada. MacLeod, D.R., et al., [1987, p.735-772, eng] 41-4042
- Performance of high ratio recycled pavements in northern Ontario. McLuckie, R.F., et al., [1987, p.829-865, eng] 41-4045
- Summary of proper cold weather pavement repair methods. Eaton, R.A., [1987, p.1013-1027, eng] 41-4051
- Experimental study on prevention of differential frost heave by using Geogrid. Ooyama, K., et al., [1985, p.179-186, jpn] 41-4586
- Discussion on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al., [1987, p.120, rus] 41-4623
- Studying shear strength of ash-slag wastes from thermal power plants located in the Northern climatic zone. Ogarkov, A.A., [1987, p.75-78, rus] 41-4624
- Offshore and Arctic pipelines—1987. [1987, 199p., eng] 41-4628
- Structural criteria for pipelines in Arctic and earthquake regions. Price, P.S.J., et al., [1987, p.89-97, eng] 41-4629
- High impact welding in Arctic pipeline construction. Loyer, A., [1987, p.99-108, eng] 41-4630
- Arctic dredge spread. Machemehl, J.L., [1987, p.125-130, eng] 41-4633
- Duplex stainless steel linepipe for Arctic use. Taira, T., et al., [1987, p.159-165, eng] 41-4635
- Cold weather operation**
- "Ross Rig" completed. Frekstad, P.A., [1986, p.58-59, eng] 41-92
- Research on transportation facilities in cold regions. Anderland, O.B., ed, [1986, 105p., eng] 41-639
- Engines and installations for arctic supply vessels. [1983, p.62-63, eng] 41-789
- Arctic/cold weather operations symposium, 1985; proceedings. [1986, 542p., eng] 41-924
- Overview of the Cold Weather Program. Kordenbrock, J.U., [1986, p.61-82, eng] 41-925
- Arctic environment. Reshaw, J.W., [1986, p.83-100, eng] 41-926
- Seaway performance improvement program. Bubeck, R.B., [1986, p.101-122, eng] 41-927
- Recent encounters with topside icing. Zahn, P.B., et al., [1986, p.123-147, eng] 41-928
- SHAREM cold weather experience. Oakes, J.R., [1986, p.149-161, eng] 41-929
- Coast Guard helicopter operations in polar regions. Wendt, P.A., [1986, p.165-173, eng] 41-930
- LAMPS MK III environmental capabilities. Olmstead, J., [1986, p.185-200, eng] 41-932
- Engineering program on anti-de-icing of the RAST track. Boston, D.A., [1986, p.201-214, eng] 41-933
- Underway replenishment in cold weather. Lyon, G., [1986, p.215-221, eng] 41-934
- Degradation of surface ship operations in polar regions. Bales, S.L., et al., [1986, p.223-237, eng] 41-935

**Cold weather operation (cont.)**

- Prevention and retardation of ice formation at sea.  
Minasian, D.T., [1986, p.283-295, eng] 41-938
- Arctic ice impact assessment for naval surface combatants.  
Devine, E.A., et al, [1986, p.297-347, eng] 41-939
- Arctic surface warfare hovercraft. Schuler, J.L., [1986, p.355-377, eng] 41-941
- Ship icing in the polar regions. Rogalski, R., [1986, p.379-406, eng] 41-942
- Arctic environmental support. Denner, W., [1986, p.429-434, eng] 41-944
- Northern latitude logistic support. Kover, D., [1986, p.435-438, eng] 41-945
- Bath iron works corporation cold weather operations studies for the CG 47 class cruiser program. Crowley, J.D., [1986, p.447-451, eng] 41-947
- Marine gas turbine inlet de-icing. Reinauer, G.A., [1986, p.457-461, eng] 41-949
- Arctic vessel research laboratory and program. Jeffrey, N.E., [1986, p.467-468, eng] 41-950
- Research on engineering in arctic and subarctic regions, the Cold Region Technology Center of Luleå University. Lindmark, R., [1986, p.125-129, eng] 41-970
- Problems of technical tribology in Arctic service conditions. Cherskii, I.N., et al, [1986, p.779-792, eng] 41-1132
- Frost-resistant fluoroplastic seals for arctic machinery. Popov, S.N., et al, [1986, p.933-951, eng] 41-1139
- Operational experience with the new-type Baltic icebreaker "Oso". Jansson, J.-E., et al, [1986, p.1039-1060, eng] 41-1145
- Weld properties for ultra-heavy steel plates for offshore structures. Homma, H., et al, [1984, p.53-59, eng] 41-1193
- Winter operating safety of tunnel water lines. Schmid, H.C., et al, [1986, p.324-326, ger] 41-1564
- CRTC maintenance—beating the odds. Dixon, C.A., Jr., [1986, p.16-18, eng] 41-1839
- Development of helicopter operational capabilities in the Arctic. Wolfe-Milner, T., [1986, p.336-351, eng] 41-2034
- AP-1-88 hovercraft in ice operations. Rosquist, K., [1986, p.590-601, eng] 41-2047
- Effects of climate on combat in European Russia. [1986, 80p. + graphs, eng] 41-2063
- Crude oil storage facility in the Arctic. Phillippi, H.L., et al, [1987, p.63-67, eng] 41-2403
- Alyeska Pipeline: monitoring, operations and maintenance. Johnson, E.R., [1986, p.126-132, eng] 41-2519
- Theoretical and application problems concerning air exchange in deep quarries (Summaries of reports presented at the All-Union conference held in Apatity, Sep. 23-25, 1985). Vasserman, A.D., ed, [1985, 178p., rus] 41-2769
- Specifics of natural air transfer in Khibiny quarries. Ivanova, L.I., [1985, p.51-53, rus] 41-2770
- Dust control on quarry roads at subzero temperatures. Loboda, A.I., et al, [1985, p.135-136, rus] 41-2771
- Strength of materials and structural elements at low temperatures. Cherskii, N.V., ed, [1985, 119p., rus] 41-2846
- Working fitness and durability of equipment in the North. Larionov, V.P., et al, [1985, p.5-13, rus] 41-2847
- Gas-thermal methods of rebuilding equipment for the North. Tiunin, V.D., et al, [1985, p.116-119, rus] 41-2853
- Dredge-excitation of ground. Ogorodnikov, S.P., [1986, 256p., rus] 41-2913
- Ball bearing lubricants operating in various environments. McMurry, E.L., [1984, 18p., eng] 41-3041
- Development of an automatic geophysical observatory. Doolittle, J.H., et al, [1985, p.229-231, eng] 41-3326
- Cold weather aspects of nuclear, biological and chemical operations. Tesko, S., [1985, 17p., eng] 41-3473
- Operation of power equipment of gas pipelines in western Siberia. Ivanov, V.A., et al, [1987, 143p., rus] 41-3687
- Improving low temperature startability of M113 vehicles: automatic engine cycling tests. Shankha, V.S., et al, [1987, 23p. + appends, eng] 41-3813
- Subzero engineering. Hills, A., [1986, p.52-56, eng] 41-4273
- Cold regions operation of diesel vehicles. Stupich, T.F., [1987, 45p. + append., eng] 41-4637
- Cold weather performance**
- Effect of cold weather on productivity. Abele, G., [1986, p.61-66, eng] 41-409
- Staffing of maintenance crews during winter months. Rissel, M.C., et al, [1985, p.12-21, eng] 41-656
- Skidding of caterpillar rippers on frozen ground and hard rocks. Efimov, B.A., [1978, p.47-49, rus] 41-1319
- Stand for accelerated tests of bulldozer engine life. Mikheenko, V.V., [1978, p.78-82, rus] 41-1326
- Floating dock. Gusev, V., [1986, p.18-19, rus] 41-1398
- High strength steel plates for Arctic offshore structures. Tagawa, H., et al, [1985, p.49-59, eng] 41-1570
- Construction of the mobile drilling platform (Super CIDS) for Arctic use. Yamama, K., et al, [1985, p.89-102, eng] 41-1571
- Silent warrior. Kies, D., [1986, p.19-21, eng] 41-1840
- Performance of diesel engine bearings at low temperature. Grobuschek, F., [1986, p.477-486, ger] 41-2892
- Dredge-excitation of ground. Ogorodnikov, S.P., [1986, 256p., rus] 41-2913
- Cold starting ability of in-service M113 vehicles. Stupich, T.F., et al, [1986, 17p. + appends., eng] 41-3010
- Durability of an arctic concrete. Regourd, M., et al, [1987, p.919-933, eng] 41-3713
- Durability of concrete under arctic offshore conditions. Kivekäs, L., et al, [1987, p.935-946, eng] 41-3714
- Pavement structure subjected to low temperature. Selvadurai, A.P.S., et al, [1987, p.277-301, eng] 41-4026
- Cold climate performance of Canadian airport pavements. Haas, R., et al, [1987, p.303-332, eng] 41-4027
- Tensile properties of asphalt concrete at freezing temperature. Anderson, K.O., et al, [1987, p.333-366, eng] 41-4028
- Bearing capacity of asphalt pavement at low temperature. Kasahara, A., et al, [1987, p.367-396, eng] 41-4029
- Results of laboratory tests on AMIR compacted asphalt slabs. El Halim, A.O., et al, [1987, p.417-451, eng] 41-4031
- Crack growth through asphalt overlays due to thermal stresses. Joseph, P., et al, [1987, p.453-491, eng] 41-4032
- Adhesive layer for overlay with thin concrete blocks. Inuzuka, M., et al, [1987, p.525-540, eng] 41-4035
- Use of rubber-modified asphalt pavements in cold regions. Takallou, H.B., et al, [1987, p.541-574, eng] 41-4036
- Consequences of deferred maintenance on transverse cracks. Chong, G.J., [1987, p.637-686, eng] 41-4039
- Crack sealing compounds in winter. Lupien, C., et al, [1987, p.689-718, eng] 41-4040
- Airport pavement distress in cold regions. Vinson, T.S., et al, [1987, p.981-1012, eng] 41-4050
- Cold weather survival**
- Cold weather clothing. Wojtaszek, R., [1986, p.349-354, eng] 41-940
- Effects of climate on combat in European Russia. [1986, 80p. + graphs, eng] 41-2063
- Huurre expedition to the North Pole in 1984. Nordlund, O.P., ed, [1987, 52p., eng] 41-3368
- Cold weather tests**
- Design methods for gas/condensate pipelines in cold environments. Hein, M.A., et al, [1986, p.143-151, eng] 41-79
- Mine detection using non-sinusoidal radar: laboratory tests. Dean, A.M., Jr., et al, [1984, 99p., eng] 41-462
- Conference of the Canadian Technical Asphalt Association, 31st, 1986. [1986, 339p. + append., eng] 41-2201
- Winter maintenance and testing of main pipelines. Zinov'ev, V.N., et al, [1987, p.29-31, rus] 41-3736
- Assessment of a small snowmobile for long-distance unsupported travel. Oscewski, R.J., et al, [1987, p.597-601, eng] 41-3859
- Development of heavy thick HT80 steel plates for racks of jack-up rigs. Okano, S., et al, [1987, p.B-14, eng] 41-3940
- Effect of microstructure on HAZ toughness of steel for offshore structures. Endo, S., et al, [1987, p.B-16, eng] 41-3942
- Investigation on the straight asphalt properties of Japan. Iijima, T., et al, [1987, p.1-36, eng] 41-4020
- Colored ice**
- Formation of the ice algae layer in antarctic sea ice. Zhang, K., et al, [1986, p.60-65, chi] 41-400
- Pseudomonas genus of bacteria isolated from Antarctic ice sheets. Sorokina, T.A., et al, [1986, p.494-504, rus] 41-1824
- Biogenic and mineral inclusions in a green iceberg from the Weddell Sea. Dieckmann, G., et al, [1987, p.31-33, eng] 41-1975
- Yellow spots on the ice of Lake Mälaren. Hjort, J., et al, [1982, p.226-230, swe] 41-2857
- Ecology of snow algae. Kawecka, B., [1986, p.407-415, eng] 41-3360
- Pseudomonas bacteria from an antarctic glacial ice sheet. Sorokina, T.A., et al, [1987, p.288-297, eng] 41-4610
- Colored snow**
- Ecology of snow algae. Kawecka, B., [1986, p.407-415, eng] 41-3360
- Snow algal bloom and habitat at Showa Station. Ishikawa, S., et al, [1986, p.191-197, eng] 41-3635
- Comets**
- Formation history and environment of cometary nuclei. Yamamoto, T., [1985, p.205-219, eng] 41-1706
- Present status of the icy conglomerate model. Whipple, F.L., [1985, p.343-366, eng] 41-1711
- Snow sublimation temperature of the cometary nucleus. Delsemme, A.H., [1985, p.367-387, eng] 41-1712
- Condensation and agglomeration of cometary ice: the H<sub>2</sub>O/H<sub>2</sub>O ratio as tracer. Ip, W.-H., [1985, p.389-395, eng] 41-1713
- Amorphous and porous ices in cometary nuclei. Smoluchowski, R., [1985, p.397-406, eng] 41-1714
- Composition and structure of the comet nucleus. Klinger, J., [1985, p.407-417, eng] 41-1715
- Amorphous-crystalline phase transition and the light curve of comet P/Halley. Rickman, H., et al, [1985, p.419-428, eng] 41-1716
- Model for an icy halo in comets. Crifo, J.F., et al, [1985, p.429-442, eng] 41-1717
- Ice in cometary grains. Campins, H., [1985, p.443-452, eng] 41-1718
- S2: a clue to the origin of cometary ice? A'Hearn, M.F., et al, [1985, p.463-471, eng] 41-1719
- Effect of dust halos and dust mantles on nuclear outgassing. Mendis, D.A., [1985, p.487-504, eng] 41-1720
- Cometary ices. Delsemme, A.H., [1985, p.505-517, eng] 41-1721
- Communication cables**
- See: Transmission lines
- Communications**
- See: Radio communication; Telecommunication
- Compaction**
- Results of laboratory tests on AMIR compacted asphalt slabs. El Halim, A.O., et al, [1987, p.417-451, eng] 41-4031
- See also: Snow compaction; Soil compaction
- Composition**
- See: Chemical composition
- Compressive properties**
- Distribution of stresses and strains in sandy bases of rigid stamps. Krivorotov, A.P., et al, [1985, p.100-103, rus] 41-325
- Elastic properties and equation of state of high pressure ice. Shaw, G.H., [1986, p.5862-5868, eng] 41-500
- Proposal of a constitutive equation of temperature firm. Ambach, W., et al, [1986, p.1-9, eng] 41-1299
- Yield and failure envelope for ice under multiaxial compressive stresses. Nadreau, J.P., et al, [1986, p.75-82, eng] 41-1306
- Acoustic emission study on multi-year sea ice in an arctic field laboratory. Sinha, N.K., [1985, p.S290-S293, eng] 41-2309
- Compressive strength of ice with bimodal distribution of grain sizes. Laughlin, J.L., et al, [1987, p.167-172, eng] 41-2418
- Confined compressive strength of horizontal first-year sea ice samples. Richter-Menge, J.A., [1987, p.197-207, eng] 41-2422
- Mechanical properties of antarctic sea ice (II). Urabe, N., et al, [1987, p.239-244, eng] 41-2427
- Reference strength of ice to be used in designing offshore structures. Tunik, A.L., [1987, p.285-290, eng] 41-2434
- Compressive behavior of saline ice. Richter-Menge, J.A., [1986, p.331-350, eng] 41-2664
- Compressive strength of saline ice. Blair, S.C., [1986, p.351-364, eng] 41-2665
- Intrinsic curve of ice under compression. Nadreau, J.P., et al, [1987, p.(C1)322-(C1)327, fre] 41-4328
- See also: Snow compression
- Compressors**
- Determination of surface temperature of anti-iced axial compressor inlet guide vane. Osipov, V.N., [1985, p.56-60, eng] 41-2943
- Computer applications**
- Oil in ice computer simulation model. Wotherspoon, P.D., et al, [1986, p.41-46, eng] 41-343
- Composition and structure of the special data bank "Snow cover in mountains". Tsarev, B.K., [1986, p.3-10, rus] 41-770
- Use of a computer model to predict the formation of ice on road surfaces. Parmenter, B.S., et al, [1986, 19p., eng] 41-1412
- Computer interfacing of meteorological sensors in severe weather. Rancourt, K., et al, [1985, p.205-211, eng] 41-1496
- Numerical methods for predicting and controlling thermal regime of rocks in permafrost areas. Izakaon, V.IU., et al, [1986, 94p., rus] 41-2745
- Automated highway design. Fedotov, G.A., [1986, 317p., rus] 41-2861
- Three dimensionally scanning Doppler radar. Fujiyoshi, Y., et al, [1986, p.133-137, jpn] 41-3886
- Computer programs**
- Analysis of NavSat buoy data, Beaufort Sea, 1980—program listings. [1981, 66p., eng] 41-1766
- Automated highway design. Fedotov, G.A., [1986, 317p., rus] 41-2861
- Fortran subroutines for zero-phase digital frequency filters. Albert, D.G., [1986, 26p., eng] 41-3648
- Isothermal phase change model for freezing and thawing soils I: development. Hromadka, T.V., II, [1986, p.113-117, eng] 41-4134
- Isothermal phase change model for freezing and thawing soils 2: model. Hromadka, T.V., II, et al, [1986, p.118-123, eng] 41-4135
- Computerized simulation**
- Computerized simulation of artificial seeding of clouds containing ice crystals. Bulfov, M.V., et al, [1986, p.3-16, rus] 41-1555
- Using pattern recognition methods in engineering-glaciological terrain analysis. Blagoveshchenski, V.P., et al, [1986, p.163-169, rus] 41-1662
- Deriving the ice sheet evolution equations. Grigorian, S.S., et al, [1984, p.892-903, eng] 41-2074
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskii, M.I.A., et al, [1986, 133p., rus] 41-2253

- All-Union tutorial seminar on mathematical modeling in science and technology. Summaries. [1986, 333p., rus] 41-2381
- Modeling the road icing process. Vorotnikov, V.I., et al, [1986, p.77-78, rus] 41-2383
- Classifier of cryogenic rock-heave. Leibman, M.O., et al, [1986, p.97-103, rus] 41-2825
- Automated highway design. Fedotov, G.A., [1986, 317p., rus] 41-2861
- Concrete admixtures**
- Concretes for high dams. Sudakov, V.B., ed, [1985, 101p., rus] 41-413
- Methods of estimating the efficiency of new surface-active additives. Sudakov, V.B., et al, [1985, p.3-9, rus] 41-414
- New air-entrainment and plastifying admixture for concretes. Berger, T.F., et al, [1985, p.9-13, rus] 41-415
- Concretes with polyfunctional admixtures. Sudakov, V.B., et al, [1985, p.13-17, rus] 41-416
- Frost resistance of concretes and their structure. Bel', A.A., [1985, p.36-38, rus] 41-417
- Concretes with complex admixtures for the Sayano-Shushenskaya dam. Ginzburg, Ts.G., et al, [1985, p.71-73, rus] 41-419
- Increasing the safety of energy-producing structures under dynamic loading. Shelnin, I.S., ed, [1985, 113p., rus] 41-426
- Modeling dynamic phenomena in power engineering structures. Samsonova, T.I., et al, [1985, p.7-13, rus] 41-427
- Cold set concrete. Beach, W.G., [1986, 12p. + 53 figs., eng] 41-523
- Reducing the amount of cement and fuel used in the production of prefabricated reinforced concrete. Dvorkin, L.I., [1985, 99p. (Pertinent p.50-69), rus] 41-650
- New compound admixture for highly frost-resistant poured concretes. Sudakov, V.B., et al, [1986, p.15-16, rus] 41-879
- Concrete admixtures for permafrost areas. Friahter, V.I.U., [1986, p.45-46, rus] 41-881
- Concrete admixtures handbook; properties, science, and technology. Ramachandran, V.S., ed, [1984, 626p., eng] 41-1030
- Antifreezing admixtures. Ratnov, V.B., et al, [1984, p.430-479, eng] 41-1032
- Fly ash, silica fume, slag, and natural pozzolans in concrete; Proceedings. [1986, 1609p. (2 vols.), eng] 41-1152
- Effects of air entrainment and freeze-thaw cycles on concrete strength. Paillere, A.M., et al, [1986, p.541-562, eng] 41-1153
- Freeze thaw resistance of silica-fume concrete. Malhotra, V.M., [1986, p.1069-1094, eng] 41-1155
- Strength and freezing-and-thawing resistance of concrete incorporating condensed silica fume. Yamato, T., et al, [1986, p.1095-1117, eng] 41-1156
- Chloride ion penetration in conventional concrete and concrete containing condensed silica fume. Marusin, S.L., [1986, p.1119-1133, eng] 41-1157
- Ice-inhibiting additives in road surfacing. Johannes, H., [1981, p.207-219, ger] 41-1548
- Polymer modified concrete. Blaga, A., et al, [1985, 4p., eng] 41-1940
- Calculating frost resistance of concrete used in land reclamation construction. Shlaen, A.G., [1986, p.19-22, rus] 41-2553
- Interaction of polymer admixtures with cements in concretes. Kozlova, V.K., et al, [1986, p.59-62, rus] 41-2756
- Concrete strength frost-tested after 4 years and after 28 days. Ianbykh, N.N., [1986, p.36-37, rus] 41-2789
- Improving thermotechnical properties of lightweight concretes for external wall panels. Fedorov, V.A., et al, [1987, p.36-37, rus] 41-2794
- Experimental use of rolled concrete mixtures in freezing weather. Vasilevskii, V.V., et al, [1987, p.8-12, rus] 41-2798
- Concrete work at the Kureyskaya power plant site. Bukhman, V.I., [1986, p.50-54, rus] 41-2869
- Moisture damage to various foamed asphalt mixtures. Castedo, H., et al, [1985, p.104-115, eng] 41-3335
- Studies of pore structure of concretes with air-entrainment admixtures. Ianbykh, N.N., [1987, p.34-35, rus] 41-3614
- Criteria of concrete frost resistance. Dvorkin, L.I., [1986, p.105-109, rus] 41-3665
- Durability of high-strength concrete. Whiting, D., [1987, p.169-186, eng] 41-3693
- Concrete durability: the interface between research and practice. O'Brien, T., et al, [1987, p.255-264, eng] 41-3695
- Improvement of concrete durability against intrusion of chloride-laden water by using sealers, coatings and various admixtures. Marusin, S., [1987, p.599-619, eng] 41-3701
- Durability of concrete containing fly ash for use in highway applications. Carrasquillo, P., [1987, p.843-861, eng] 41-3709
- Freeze-thaw resistance of polymer modified concrete. Balaguru, P., et al, [1987, p.863-876, eng] 41-3710
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Evaluation and prediction of concrete durability—Ontario Hydro's experience. Sturup, V., et al, [1987, p.1121-1154, eng] 41-3721
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Mathematical model of the freezing process of concrete. Olsen, M.P.J., [1984, p.113-122, eng] 41-2002
- Damage of concrete sleepers by calcium chloride. Bernisson, L., et al, [1982, p.87-92, eng] 41-2113
- Service life of concrete structures. Vesikari, E., [1986, 88p., fin] 41-2484
- Changes in asphalt concrete durability due to freeze thaw cycles. Gilmore, D.W., et al, [1985, p.73-88, eng] 41-3334
- Moisture damage to various foamed asphalt mixtures. Castedo, H., et al, [1985, p.104-115, eng] 41-3335
- Concrete durability. [1987, 2179p. (2 vols.), eng] 41-3690
- Importance of the surface layer for the durability of concrete structures. Meyer, A., [1987, p.49-61, eng] 41-3691
- Classification of the deterioration of concrete based on mechanism. Popovics, S., [1987, p.131-142, eng] 41-3692
- Durability of high-strength concrete. Whiting, D., [1987, p.169-186, eng] 41-3693
- Evaluation of durability for concrete in terms of watertightness by "permeability coefficient test results". Tanahashi, I., et al, [1987, p.187-206, eng] 41-3694
- Concrete durability: the interface between research and practice. O'Brien, T., et al, [1987, p.255-264, eng] 41-3695
- Durability of concrete containing cement kiln dust. Ramakrishnan, V., et al, [1987, p.305-321, eng] 41-3696
- Making more durable concrete with polymeric fibers. Vondran, G., [1987, p.377-396, eng] 41-3697
- Concrete durability in bridges. Hawkins, M., [1987, p.397-421, eng] 41-3698
- Durability considerations—precast concrete pipe. Bealey, M., [1987, p.493-508, eng] 41-3699
- Durability of concrete bridges in Belgium—balance of the systematic inspection. Van Begin, C., [1987, p.541-554, eng] 41-3700
- Improvement of concrete durability against intrusion of chloride-laden water by using sealers, coatings and various admixtures. Marusin, S., [1987, p.599-619, eng] 41-3701
- Rapid one-cycle test for evaluating aggregate performance when exposed to freezing and thawing in concrete. Faulkner, T., et al, [1987, p.705-722, eng] 41-3702
- Destruction of concrete water tanks in a severe climate due to ice lensing. Rogers, C., et al, [1987, p.723-739, eng] 41-3703
- Durability of concrete with a superplasticizing admixture. Dhir, R., et al, [1987, p.741-764, eng] 41-3704
- Durability of high-strength concrete containing a high range water reducer. Robson, G., [1987, p.765-780, eng] 41-3705
- Cracking due to frost action in Portland cement concrete pavements—a literature survey. Sawan, J., [1987, p.781-803, eng] 41-3706
- Deterioration of concrete used in road bridges due to freezing and thawing. Fujiwara, T., [1987, p.805-818, eng] 41-3707
- Frost susceptibility of high-strength concrete. Philleo, R., [1987, p.819-842, eng] 41-3708
- Frost susceptibility of high-strength concrete. Philleo, R., [1987, p.819-842, eng] 41-3708
- Durability of concrete containing fly ash for use in highway applications. Carrasquillo, P., [1987, p.843-861, eng] 41-3709
- Freeze-thaw resistance of polymer modified concrete. Balaguru, P., et al, [1987, p.863-876, eng] 41-3710
- Effect of curing and type of cement on the resistance of concrete to freezing in deicing salt solutions. Gunter, M., et al, [1987, p.877-899, eng] 41-3711
- Freezing and thawing resistance of concrete containing chloride. Yamato, T., et al, [1987, p.901-917, eng] 41-3712
- Durability of an arctic concrete. Regourd, M., et al, [1987, p.919-933, eng] 41-3713
- Durability of concrete under arctic offshore conditions. Kivckis, L., et al, [1987, p.935-946, eng] 41-3714
- Theoretical aspect and methods of testing concrete resistance to freezing and deicing chemicals. Bjegovic, D., et al, [1987, p.947-971, eng] 41-3715
- Strength and durability of concretes made with type 10 cements used in Ontario. Northwood, R., et al, [1987, p.973-996, eng] 41-3716
- Durability of fiber reinforced concrete in a severe marine environment. Hoff, G., [1987, p.997-1041, eng] 41-3717
- Fly ash and concrete durability. Klieger, P., et al, [1987, p.1043-1069, eng] 41-3718
- Durability of shotcrete. Schrader, E., et al, [1987, p.1071-1101, eng] 41-3719
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Evaluation and prediction of concrete durability—Ontario Hydro's experience. Sturup, V., et al, [1987, p.1121-1154, eng] 41-3721
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-3722
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al, [1987, p.1103-1119, eng] 41-3720
- Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al, [1987, p.1155-1182, eng] 41-372



**Concrete durability (cont.)**

- Freeze thaw durability of concretes with fly ash and microsilica. Johnston, C., [1987, p.1183-1204, eng] 41-3723
- Methodology of modeling for concrete durability. Samarin, A., [1987, p.1205-1225, eng] 41-3724
- Durability of concrete containing cementing materials in sea water. Malhotra, V., et al, [1987, p.1227-1258, eng] 41-3725
- Major concrete durability problems. Newman, K., [1987, p.1259-1283, eng] 41-3726
- Aggregate—the decisive element in the frost resistance of concrete. Teodoru, G., [1987, p.1297-1310, eng] 41-3727
- Freeze thaw durability of limestone aggregates in concrete. Lane, D., et al, [1987, p.1311-1323, eng] 41-3728
- Deterioration of aggregates—the underlying causes. Hudec, P., [1987, p.1325-1342, eng] 41-3729
- Concrete deterioration associated with alkali-aggregate reactions. Fournier, B., et al, [1987, p.1343-1364, eng] 41-3730
- Corrosion protection of the concrete components of bridges. Mauning, D., [1987, p.1527-1547, eng] 41-3732
- Relationship of corrosion of reinforced concrete structures to marine environments. Bjugovic, D., [1987, p.1603-1609, eng] 41-3733
- Exposure tests at Treat Island. Smith, R.J., [1987, p.48-53, eng] 41-4175
- Concrete freezing**
- Concrete frost resistance in areas of variable water levels. Kargin, G.M., [1985, p.44-49, rus] 41-418
- Concrete resistance to frost and salt. Hilsdorf, H.K., et al, [1986, p.57-62, ger] 41-832
- New compound admixture for highly frost-resistant poured concretes. Sudakov, V.B., et al, [1986, p.15-16, rus] 41-879
- Concrete admixtures for permafrost areas. Friahter, V.I.U., [1986, p.45-46, rus] 41-881
- Statistical nature of concrete frost resistance indices. Filonidov, A.M., [1986, p.65-66, rus] 41-884
- Concrete admixtures handbook: properties, science, and technology. Ramachandran, V.S., ed, [1984, 626p., eng] 41-1030
- Winter concreting using heated formwork. Belvel', A.S., et al, [1986, p.28-29, rus] 41-1535
- Service life of cellular concrete products. Silaenkov, E.S., [1986, 175p., rus] 41-1683
- Calculating the frost resistance of concrete. Moskvina, V.M., [1986, p.7-8, rus] 41-1885
- Performance of the Zeya hydroelectric power plant dam during its initial period. Epifanov, A.P., et al, [1986, p.18-21, rus] 41-1919
- Resistance of massive concrete structures to thermal cracking. Trapeznikov, L.P., [1986, 271p., rus] 41-1986
- Mathematical model of the freezing process of concrete. Olsen, M.P.J., [1984, p.113-122, eng] 41-2002
- Concrete strength frost-tested after 4 years and after 28 days. Ianbykh, N.N., [1986, p.36-37, rus] 41-2789
- Ice formation in hardened cement paste. Pt.3. Bager, D.H., et al, [1987, p.1-11, eng] 41-2895
- Freeze-thaw durability of concrete with and without silica fume. Pigeon, M., et al, [1986, p.76-85, eng] 41-2897
- Improvement of technology and quality control of concreting moorings in the northeastern Ob-Irtyskh Basin. Poliakov, B.I., et al, [1986, p.59-68, rus] 41-2910
- Studies of pore structure of concretes with air-entrainment admixtures. Ianbykh, N.N., [1987, p.34-35, rus] 41-3614
- Criteria of concrete frost resistance. Dvorkin, L.I., [1986, p.105-109, rus] 41-3665
- Durability of concrete containing cement kiln dust. Ramakrishnan, V., et al, [1987, p.305-321, eng] 41-3696
- Rapid one-cycle test for evaluating aggregate performance when exposed to freezing and thawing in concrete. Faulkner, T., et al, [1987, p.705-722, eng] 41-3702
- Effect of curing and type of cement on the resistance of concrete to freezing in deicing salt solutions. Gunter, M., et al, [1987, p.877-899, eng] 41-3711
- Methods of acting on the state of stress of massive concrete hydraulic structures. Garkun, L.M., et al, [1987, 111p., rus] 41-4123
- Frost resistance of autoclaved materials. Pinsker, V.A., [1986, p.31-39, rus] 41-4501
- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., [1986, p.122-167, rus] 41-4502
- Plasticity of lightweight concrete at cryogenic temperatures. Rostkay, F.S., et al, [1987, p.3-17, eng] 41-4543
- Frost resistance and waterproofness of steamed fine-grained concretes. Orlov, M.T., et al, [1987, p.74-77, rus] 41-4626
- Concrete hardening**
- Winter concreting using heated formwork. Belvel', A.S., et al, [1986, p.28-29, rus] 41-1535
- Service life of cellular concrete products. Silaenkov, E.S., [1986, 175p., rus] 41-1683

- Frost resistance criteria of cellular, autoclave-hardened concretes. Shelkin, A.E., et al, [1986, p.31-32, rus] 41-1884
- Calculating the frost resistance of concrete. Moskvina, V.M., [1986, p.7-8, rus] 41-1885
- Resistance of massive concrete structures to thermal cracking. Trapeznikov, L.P., [1986, 271p., rus] 41-1986
- Frost resistance and hardening of concrete. Ruohomäki, J., [1986, 35p. + append., fin] 41-2523
- Winter concreting at the Bol'shoy Almaatinskiy Channel. Garifulin, V.M., et al, [1985, p.18-19, rus] 41-2552
- Concrete with A.C.F. admixture for transportation engineering. Solomatov, V.I., et al, [1986, 63p., rus] 41-3803
- Concrete heating**
- Cold weather concrete. Drake, B., [1987, p.6, eng] 41-3784
- Frost resistance and waterproofness of steamed fine-grained concretes. Orlov, M.T., et al, [1987, p.74-77, rus] 41-4626
- Concrete pavements**
- Problem of the resistance of concrete surfaces to salting. Stehno, G., [1985, p.59-63, ger] 41-391
- Factors affecting the cracking of asphalt concrete pavements. Ruth, B.E., et al, [1986, p.96-109, eng] 41-2202
- Asphalt overlay on the Garville bridge. Koubsky, P., [1986, p.132-139, eng] 41-2203
- Performance of bituminous surface treatments in northern Canada. MacLeod, D.R., et al, [1986, p.206-228, eng] 41-2205
- Effective sectional road pavements for northern regions and Siberia. Karpov, B.N., et al, [1986, 96p., rus] 41-2211
- Temperature distribution in composite bridges. Kennedy, J.B., et al, [1987, p.475-482, eng] 41-2485
- Adhesive layer for overlay with thin concrete blocks. Inuzuka, M., et al, [1987, p.525-540, eng] 41-4035
- Concrete piles**
- Pyramidal piles with intermediate sand-cushions for weak ground. Kugno, V.S., et al, [1985, p.20-21, rus] 41-283
- Piles made of steel-fiber-concrete. Tupitsyna, V.N., [1985, p.48-49, rus] 41-299
- Calculating pile foundations for hydraulic structures. Levachev, S.N., et al, [1986, 133p., rus] 41-1747
- Construction of electric power substations in permafrost regions. Khomutov, V.A., et al, [1986, p.22-23, rus] 41-1920
- Bridge piers without grillage under complicated natural conditions. Kudriashov, V.I., et al, [1987, p.16-17, rus] 41-2793
- Foolproof sinking of piles into thawed and perennially frozen grounds. Novozhilov, G.F., [1987, 111p., rus] 41-4167
- Concrete placing**
- Using dry, low-cement concretes in permafrost areas. Zaltsman, O.M., et al, [1986, p.31-35, rus] 41-2867
- Integrated groups of concrete-placing equipment in polar regions. Nesterov, V.V., et al, [1987, p.5-7, rus] 41-3065
- Concrete with A.C.F. admixture for transportation engineering. Solomatov, V.I., et al, [1986, 63p., rus] 41-3803
- Concrete lining of tunnels. Belkin, M.N., et al, [1987, p.63-67, rus] 41-3809
- See also: Winter concreting
- Concrete retarders**
- Concretes with polyfunctional admixtures. Sudakov, V.B., et al, [1985, p.13-17, rus] 41-416
- Concrete strength**
- Properties of slag concrete. Ruohomäki, J., et al, [1986, 43p., fin] 41-604
- Concrete resistance to frost and salt. Hilsdorf, H.K., et al, [1986, p.57-62, ger] 41-832
- Statistical nature of concrete frost resistance indices. Filonidov, A.M., [1986, p.65-66, rus] 41-884
- Durability of lightweight concrete for arctic concrete structures. Nojiri, Y., et al, [1985, p.431-438, eng] 41-889
- Behavior of lightweight concretes at cryogenic temperatures. Berner, D.E., et al, [1985, p.439-445, eng] 41-890
- Fly ash, silica fume, slag, and natural pozzolans in concrete. Proceedings. [1986, 1609p. (2 vols.), eng] 41-1152
- Effects of air entrainment and freeze-thaw cycles on concrete strength. Paillere, A.M., et al, [1986, p.541-562, eng] 41-1153
- Freeze thaw resistance of silica-fume concrete. Malhotra, V.M., [1986, p.1069-1094, eng] 41-1155
- Strength and freezing-and-thawing resistance of concrete incorporating condensed silica fume. Yamato, T., et al, [1986, p.1095-1117, eng] 41-1156
- Chloride ion penetration in conventional concrete and concrete containing condensed silica fume. Marusin, S.L., [1986, p.1119-1133, eng] 41-1157
- Frost heave of a channel with concrete lining. Zhu, D., et al, [1986, p.201-208, chi] 41-1416
- Anti-heave effect of wind-blown sands in irrigation canals. Zhu, D., et al, [1986, p.239-244, chi] 41-1422

- Concrete linings of hydraulic structures to prevent frost heave. Zhu, C., [1986, p.309-312, chi] 41-1437
- High strength concrete control. Sehgal, P., et al, [1986, p.32-34, eng] 41-1468
- Winter concreting using heated formwork. Belvel', A.S., et al, [1986, p.28-29, rus] 41-1535
- Properties of combined aggregate concretes of centrifugal power line supports. Shurygin, V.P., et al, [1985, p.5-11, rus] 41-1542
- Concrete pavers for aircraft pavement surfaces. Emery, J.A., [1986, p.609-623, eng] 41-1546
- Using stress transducers in predicting frost resistance of concrete. Ter-Gazarian, G.N., et al, [1985, p.85-88, rus] 41-1622
- Behavior of prestressed lightweight concrete subjected to high-intensity cyclic stress at cryogenic temperatures. Berner, D.E., et al, [1986, p.727-736, eng] 41-1865
- Frost resistance criteria of cellular, autoclave-hardened concretes. Shelkin, A.E., et al, [1986, p.31-32, rus] 41-1884
- Microclimate of concrete walls. Hudec, P.P., et al, [1986, p.615-623, eng] 41-1997
- Transverse deformation of loaded concrete at low temperature. Elices, M., et al, [1986, p.741-748, eng] 41-1999
- Thermal deformation of lightweight concretes at low temperature. Correa, H., et al, [1986, p.845-852, eng] 41-2001
- Thermal deformation of loaded concrete. Planas, J., et al, [1984, p.639-644, eng] 41-2003
- Effect of temperature variations on the bonding of concrete overlays. Dhir, M.P., [1984, p.172-179, eng] 41-2073
- Damage of concrete sleepers by calcium chloride. Bernisson, L., et al, [1982, p.87-92, eng] 41-2113
- Low-temperature mechanical properties of asphalt concrete. Kallas, B.F., [1982, 53p., eng] 41-2136
- Conference of the Canadian Technical Asphalt Association, 31st, 1986. [1986, 339p. + append., eng] 41-2201
- Development of a method to evaluate the low temperature tensile properties of asphalt concrete. Anderson, K.O., et al, [1986, p.156-189, eng] 41-2204
- Calculating mean temperature of concrete during the cooling of structures. Golovnev, S.G., et al, [1986, p.126-130, rus] 41-2759
- Canadian Building Congress, 4th, 1985. [1985, 381p., eng] 41-3190
- Parking garage problem. Litvan, G.G., [1985, p.214-218, eng] 41-3192
- Deterioration of parking garages: preventative design. Tay, D.C.K., [1985, p.228-237, eng] 41-3193
- Chemical solutions to the chemical problem. Minak, L.D., [1985, p.238-244, eng] 41-3194
- Criteria of concrete frost resistance. Dvorkin, L.I., [1986, p.105-109, rus] 41-3665
- Concrete durability. [1987, 2179p. (2 vols.), eng] 41-3690
- Durability of high-strength concrete. Whiting, D., [1987, p.169-186, eng] 41-3693
- Making more durable concrete with polymeric fibers. Vondran, G., [1987, p.377-396, eng] 41-3697
- Durability of high-strength concrete containing a high range water reducer. Robson, G., [1987, p.765-780, eng] 41-3705
- Durability of an arctic concrete. Regourd, M., et al, [1987, p.919-933, eng] 41-3713
- Strength and durability of concretes made with type 10 cements used in Ontario. Northwood, R., et al, [1987, p.973-996, eng] 41-3716
- Durability of shotcrete. Schrader, E., et al, [1987, p.1071-1101, eng] 41-3719
- Durability of concrete containing cementing materials in sea water. Malhotra, V., et al, [1987, p.1227-1258, eng] 41-3725
- Aggregate—the decisive element in the frost resistance of concrete. Teodoru, G., [1987, p.1297-1310, eng] 41-3727
- Freeze thaw durability of limestone aggregates in concrete. Lane, D., et al, [1987, p.1311-1323, eng] 41-3728
- Reinforcement corrosion and the use of CSF-based additives. Fidjestol, P., [1987, p.1445-1458, eng] 41-3731
- Relationship of corrosion of reinforced concrete structures to marine environments. Bjugovic, D., [1987, p.1603-1609, eng] 41-3733
- Concrete with A.C.F. admixture for transportation engineering. Solomatov, V.I., et al, [1986, 63p., rus] 41-3803
- Changes in properties of asphalt concretes due to aging. Sato, K., et al, [1987, p.85-116, eng] 41-4022
- Low temperature cracking susceptibility of asphalt concrete. Janoo, V.C., et al, [1987, p.397-415, eng] 41-4030
- Methods of acting on the state of stress of massive concrete hydraulic structures. Garkun, L.M., et al, [1987, 111p., rus] 41-4123
- Frost resistance and waterproofness of steamed fine-grained concretes. Orlov, M.T., et al, [1987, p.74-77, rus] 41-4626



**Concrete structures**

- State-of-the-art report on offshore concrete structures for the Arctic. [1985, 117p., eng] **41-82**
- Brittleness of reinforced concrete structures under arctic conditions. Kivekäs, L., et al, [1986, 20p., eng] **41-213**
- Foundations for low-rise buildings on frost-heaving ground. Zhelezniak, I.I., [1985, p.47, rus] **41-298**
- Concrete for high dams. Sudakov, V.B., ed, [1985, 101p., rus] **41-413**
- Increasing the safety of energy-producing structures under dynamic loading. Sheftin, I.S., ed, [1985, 113p., rus] **41-426**
- State of stress and thermal stresses in concrete and reinforced concrete of hydraulic structures. Karavaev, A.V., ed, [1985, 104p., rus] **41-428**
- Reinforced concrete plating for bridge reconstructions. Kvaasha, V.G., et al, [1985, p.5-7, rus] **41-507**
- Construction of foundations of low-rise buildings and structures on sagging ground. Koroteev, D.V., [1986, 155p. (pertinent p. 80-135), rus] **41-784**
- Canyon Creek bridge. Carlson, L., et al, [1986, p.43-47, eng] **41-827**
- Concrete admixtures for permafrost areas. Frishter, V.I.U., [1986, p.45-46, rus] **41-881**
- Nondestructive testing of frost-resistant concrete piles. Ponomarev, O.I., et al, [1986, p.62-63, rus] **41-883**
- Lift-slab method of erecting a 30-story building in Krasnoyarsk. Minits, V.M., et al, [1986, p.14-16, rus] **41-888**
- Durability of lightweight concrete for arctic concrete structures. Nojiri, Y., et al, [1985, p.431-438, eng] **41-889**
- Thermos method of winter concreting. Zubkov, V.I., et al, [1986, p.118-122, rus] **41-907**
- Swedish investigations of ice-structure interaction in the Baltic. Janson, J.E., [1986, p.707-711, eng] **41-1126**
- Theoretical basis for planning northern cities. Panov, L.A., [1986, p.146-154, rus] **41-1206**
- Selection of optimal dimensions for hydraulic structures in ports. Piniagin, B.A., et al, [1986, p.77-81, rus] **41-1396**
- Construction of the mobile drilling platform (Super CIDS) for Arctic use. Maruyama, K., et al, [1985, p.89-102, eng] **41-1571**
- Using stress transducers in predicting frost resistance of concrete. Ter-Gazarian, G.N., et al, [1985, p.85-88, rus] **41-1622**
- Offshore platform with ice-penetrating nose. Gerwick, B.C., Jr., et al, [1983, 8 col. + figs., eng] **41-1670**
- Service life of cellular concrete products. Silaenkov, E.S., [1986, 175p., rus] **41-1683**
- Light one-layer concrete enclosures designed for the North. Makarova, N.A., et al, [1986, p.36-37, rus] **41-1889**
- Performance of the Zeya hydroelectric power plant dam during its initial period. Epifanov, A.P., et al, [1986, p.18-21, rus] **41-1919**
- Ultrasonic tests of grouting quality in concrete dams. Ermoshin, V.M., et al, [1986, p.33-36, rus] **41-1922**
- Resistance of massive concrete structures to thermal cracking. Trapeznikov, L.P., [1986, 271p., rus] **41-1986**
- Structural heat-engineering for road pavements. Mikhailov, A.V., et al, [1986, 149p., rus] **41-2210**
- Scandinavian report. [1983, p.S1-S16, eng] **41-2226**
- Concrete island under ice loading. Templeton, J.S., III, et al, [1987, p.33-40, eng] **41-2399**
- Thermal characteristics of concrete structures during curing processes. Wu, C.Z., et al, [1987, p.113-118, eng] **41-2411**
- Service life of concrete structures. Vesikari, E., [1986, 88p., fin] **41-2484**
- Calculating mean temperature of concrete during the cooling of structures. Golovnev, S.G., et al, [1986, p.126-130, rus] **41-2759**
- Classification of means of ballasting and fastening pipelines. Vasil'ev, N.P., et al, [1986, p.20-21, rus] **41-2782**
- Designing moorings built of fused enlarged blocks. Goncharov, V.V., et al, [1986, p.25-26, rus] **41-2788**
- Experimental use of rolled concrete mixtures in freezing weather. Vasilievskii, V.V., et al, [1987, p.8-12, rus] **41-2798**
- Concrete work at the Kureyskaya power plant site. Bukhman, V.I., [1986, p.50-54, rus] **41-2869**
- Construction of structures and foundations by the grout curtain method. Smorodnikov, M.I., et al, [1986, 216p., rus] **41-2886**
- Studies and calculations in structural design and building technology of hydraulic transport structures. Shkol'nikov, I.E., ed, [1986, 96p., rus] **41-2908**
- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] **41-2919**
- Methods of protecting hydraulic structure concretes from frost. Davidenko, V.M., et al, [1986, p.293-299, eng] **41-2940**
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] **41-3013**

- Recommendations for the factory finishings of new standard house facades for northern towns. Kholopova, L.I., et al, [1986, 39p., rus] **41-3021**
- Arctic offshore research in VTT structural laboratories. Jumppanen, P., [1985, p.51-53, eng] **41-3085**
- Construction of deep foundations. Glotov, N.M., et al, [1985, 248p., rus] **41-3125**
- Geomechanical studies of power supply structure foundations. Saepgin, D.D., ed, [1985, 120p., rus] **41-3126**
- Different domains of application of cold. Manual. Bykov, A.V., ed, [1985, 271p. (Pertinent p.: 42-66, 99-125, 222-260), rus] **41-3154**
- Reducing the amount of construction materials needed under conditions of Siberia and the Far East. Nesterov, V.V., [1986, 136p., rus] **41-3157**
- Reinforced concrete for petroleum industry structures of the Arctic Shelf. Abadzhian, K.A., [1985, p.32-33, rus] **41-3205**
- Service life of flexible elements subject to freeze-thaw cycles. Krakovskii, M.B., et al, [1986, p.19-20, rus] **41-3207**
- Thermal regime and stresses in concrete dams in permafrost areas. Epifanov, A.P., et al, [1987, p.35-37, rus] **41-3268**
- Building stone-earth-fill dams in the North. Kogodovskii, O.A., [1986, p.171-182, rus] **41-3460**
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, [1986, 328p., rus] **41-3664**
- Tidal power plants. Bernshtein, L.B., et al, [1987, 296p. (Pertinent p.239-273), rus] **41-3675**
- Importance of the surface layer for the durability of concrete structures. Meyer, A., [1987, p.49-61, eng] **41-3691**
- Durability considerations—precast concrete pipe. Bealey, M., [1987, p.493-508, eng] **41-3699**
- Destruction of concrete water tanks in a severe climate due to ice lensing. Rogers, C., et al, [1987, p.723-739, eng] **41-3703**
- Major concrete durability problems. Newman, K., [1987, p.1259-1283, eng] **41-3726**
- Concrete deterioration associated with alkali-aggregate reactions. Fournier, B., et al, [1987, p.1343-1364, eng] **41-3730**
- State-of-the-art report on offshore concrete structures for the Arctic. [1986, 117p., eng] **41-3787**
- Facade elements clad with clinker finish. Orantie, K., [1987, 36p. + append., fin] **41-3844**
- Methods of acting on the state of stress of massive concrete hydraulic structures. Garkun, L.M., et al, [1987, 111p., rus] **41-4123**
- Making concrete dams monolithic by cementing structural joints. Argal, E.S., [1987, 119p., rus] **41-4150**
- Rigid surfaces for roads and airports. Glushkov, G.I., et al, [1987, 255p., rus] **41-4151**
- Frost resistance of autoclaved materials. Pinsker, V.A., [1986, p.31-39, rus] **41-4501**
- Formation and development of the Kola Mining Complex. Peshev, N.G., ed, [1986, 123p., rus] **41-4556**
- Efficiency of producing and using lightweight concretes for construction in the Murmansk region. Nesterov, V.V., et al, [1986, p.62-67, rus] **41-4557**
- Concretes**
- Methods of estimating the efficiency of new surface-active additives. Sudakov, V.B., et al, [1985, p.3-9, rus] **41-414**
- High frost resistance of concrete objects impregnated with polymer solutions. Belov, L.F., et al, [1985, p.41-50, rus] **41-1544**
- Iron ore wastes used in construction materials in the North. Prokof'eva, V.V., et al, [1986, 176p., rus] **41-2214**
- Stress-strain state of the Sayano-Sushenskoe dam during filling of the reservoir. Aleksandrovskaya, E.K., [1986, p.123-129, eng] **41-2713**
- Damage mechanism of cyclic freezing-thawing in sulfur concrete. Cohen, M.D., [1987, p.357-360, eng] **41-3215**
- Effects of freeze-thaw cycles on the microstructure of hydration products. Pigeon, M., et al, [1986, p.1-19, eng] **41-4141**
- See also: Bituminous concretes; Cellular concretes; Lightweight concretes; Precast concretes; Reinforced concretes
- Condensation**
- Condensation and agglomeration of cometary ice: the H<sub>2</sub>O/H<sub>2</sub>O ratio as tracer. Ip, W.-H., [1985, p.389-395, eng] **41-1713**
- Condensation nuclei**
- Ice-forming characteristics of giant aerosol particles in the atmosphere. El'mesov, M.S., [1986, p.238-248, rus] **41-3673**
- Conduction**
- Simulation of Erebus Glacier Tongue thermal regime. Stolle, D.F.E., et al, [1986, p.530-534, eng] **41-4309**
- Conductivity**
- See: Electrical resistivity; Thermal conductivity
- Conferences**
- See: Meetings
- Consolidation**
- See: Thaw consolidation

**Construction**

- Some aspects of economic development of northern regions. Loginov, V.G., [1985, p.15-21, rus] **41-205**
- Antarctic docking facility study carried out by Han-Padron Associates. [1986, n.p., eng] **41-214**
- Effective sectional road pavements for northern regions and Siberia. Karpov, B.N., et al, [1986, 96p., rus] **41-2211**
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] **41-3433**
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, [1986, 328p., rus] **41-3664**
- See also: Cold weather construction; Modular construction
- Construction equipment**
- Hydromechanization in construction of electric power plants. Shkundin, B.M., [1986, 224p. (pertinent p.156-174), rus] **41-619**
- Determining economic effectiveness of technical equipment in the North. Dashkova, T.E., [1986, p.188-192, rus] **41-1207**
- Studies of frozen ground excavation equipment. Iarkin, A.A., ed, [1978, 87p., rus] **41-1310**
- Calculating metallic structures of excavation equipment. Selivanov, A.S., [1978, p.8-14, rus] **41-1312**
- Determining the parameters of ripper-tooth extensions. Sukhov, I.I., et al, [1978, p.14-20, rus] **41-1313**
- Plotting a theoretical diagram of loads on cutting tools. Zakharov, V.A., [1978, p.25-30, rus] **41-1315**
- Determining loads on multi-blade milling tools. Zakharov, V.A., [1978, p.30-36, rus] **41-1316**
- Determining servomechanism parameters of d/p-wedge percussive machines. Aranzon, M.I., et al, [1978, p.36-41, rus] **41-1317**
- Skidding of caterpillar rippers on frozen ground and hard rocks. Efimov, B.A., [1978, p.47-49, rus] **41-1319**
- Determining conditions for rational operation of rippers. Polonskii, G.L., [1978, p.49-52, rus] **41-1320**
- Studying the influence of cutting speed and cutting-tool parameters on frozen ground excavation. Sokolov, L.K., [1978, p.53-55, rus] **41-1321**
- Stand for accelerated tests of bulldozer engine life. Mikheenko, V.V., [1978, p.78-82, rus] **41-1326**
- Design model of a percussion machine for soil compaction. Popov, G.N., et al, [1986, p.103-107, rus] **41-1394**
- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., [1986, p.92-94, rus] **41-2161**
- Designing canal linings for frost heaving ground. Alimov, A.G., [1986, p.19-24, rus] **41-2554**
- Strength of materials and structural elements at low temperatures. Cherskii, N.V., ed, [1985, 119p., rus] **41-2846**
- Working fitness and durability of equipment in the North. Larionov, V.P., et al, [1985, p.5-13, rus] **41-2847**
- Gas-thermal methods of rebuilding equipment for the North. Tiunin, V.D., et al, [1985, p.116-119, rus] **41-2853**
- Organization of construction under special environmental and climatic conditions. Construction manual. Shakhparonov, V.V., et al, [1986, 255p., rus] **41-2862**
- Dredge-excitation of ground. Ogorodnikov, S.P., [1986, 256p., rus] **41-2913**
- Integrated groups of concrete-placing equipment in polar regions. Nesterov, V.V., et al, [1987, p.5-7, rus] **41-3065**
- Equipment for mechanized drilling of ice covers. Tavrizov, V.M., [1987, p.13-15, rus] **41-3066**
- Rotary trench excavators for permafrost. Bondarenko, V.P., [1987, p.15-16, rus] **41-3067**
- Mechanized laying of communication cables under difficult conditions. Kuz'menko, V.V., et al, [1987, 161p., rus] **41-3609**
- Integrated mechanization of earthwork. Degtiarev, A.P., et al, [1987, 335p. (Pertinent p.284-318), rus] **41-3674**
- Improving the performance of excavation equipment designed for the North. Primerov, S.N., et al, [1987, p.26-27, rus] **41-4122**
- Construction materials**
- Economic prerequisites for development in the northern Urals. Pakhomov, V.P., [1985, p.3-14, rus] **41-204**
- Shields designed to counteract frost heave. Pchelintsev, A.M., [1985, p.41-42, rus] **41-294**
- Description of the building materials data base for Portland, Maine. Merry, C.J., et al, [1986, 83p., eng] **41-662**
- Steel plates for arctic offshore structures. Itoh, K., et al, [1986, p.807-832, eng] **41-1134**
- New materials for sub-arctic and arctic offshore structures. Itoh, K., et al, [1986, p.833-968, eng] **41-1135**
- Material selection and fabrication recommendations for arctic offshore structures. Lohne, P.W., [1986, p.897-910, eng] **41-1137**
- Cast steels for sub-arctic offshore applications. Martikainen, H., et al, [1986, p.911-932, eng] **41-1138**
- Frost-resistant fluoroplastic seals for arctic machinery. Popov, S.N., et al, [1986, p.933-951, eng] **41-1139**
- Structural hollow sections and PE-coated steel pipes in the Arctic. Soininen, R., [1986, p.970-987, eng] **41-1141**

**Construction materials (cont.)**

- Determining economic effectiveness of technical equipment in the North. Dashkova, T.E., et al, 1986, p.188-192, rus; 41-1207
- Physical methods of studying material used in railroad technology. Vereshchagin, I.K., ed, 1982, 135p., rus; 41-1273
- Ice adhesion to structural materials. Kozlovskaya, R.T., et al, 1982, p.96-101, rus; 41-1274
- Calculating frost resistance of structural elements. Kuz'min, V.R., 1986, 145p., rus; 41-1985
- Iron ore wastes used in construction materials in the North. Prokof'eva, V.V., et al, 1986, 176p., rus; 41-2214
- Challenging concept in road construction: superlight fill materials. Frydenlund, T.E., 1986, p.11-14, eng; 41-2260
- Inventorying building materials. Merry, C.J., 1986, 25p., eng; 41-2530
- Nature of fines produced in aggregate processing. Pintner, R.M., et al, 1987, p.10-21, eng; 41-2765
- Calculating the cold resistance of shipbuilding steel. Sokolov, A.O., 1987, p.42-43, rus; 41-2787
- Durability of metal structures of industrial buildings in Yakutia. Filippov, V.V., et al, 1985, p.37-47, rus; 41-2849
- Granular base and sub-base materials. Hill, J., 1981, p.33-38, eng; 41-2924
- Frost heave compliance testing in Scotland. Fairley, H.G., 1981, p.57-62, eng; 41-2927
- Research at TRRL on the frost-susceptibility of roadmaking materials. Sherwood, P.T., 1981, p.151-160, eng; 41-2928
- Mobile dwellings for the North. Saprykina, N.A., 1986, 215p., rus; 41-3012
- Recommendations for the factory finishings of new standard house facades for northern towns. Kholopova, L.I., et al, 1986, 39p., rus; 41-3021
- Slag-pumice concrete for industrial construction. Krichavskii, A.P., et al, 1986, 84p. (Pertinent p.70-84), rus; 41-3022
- Reducing the amount of construction materials needed under conditions of Siberia and the Far East. Nesterov, V.V., 1986, 136p., rus; 41-3157
- Changes in physical and mechanical properties of frozen ground used as construction material. Liapin, V.E., et al, 1986, p.30-34, rus; 41-3443
- Description of the building materials data base for Cincinnati, Ohio. Merry, C.J., et al, 1986, 85p., eng; 41-3498
- Tidal power plants. Bernshtein, L.B., et al, 1987, 296p. (Pertinent p.239-273), rus; 41-3675
- Asphalt pavement durability improved by surface treatment. Anzaki, Y., et al, 1987, p.619-636, eng; 41-4038
- In-situ thermal conductivity measurements. Atkins, R.T., 1983, 38p., eng; 41-4070
- Drilling instruments made of extra-hard materials. Collection of scientific papers. Vovchanovskii, I.F., ed, 1986, 87p., rus; 41-4498
- Research in building engineering. Structural thermodynamics. Service life of structures. Polonskii, V.P., ed, 1986, 179p., rus; 41-4500
- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., 1986, p.122-167, rus; 41-4502
- Adfreezing of the materials of skis' sliding surfaces to snow and ice. Ermakov, K.K., 1984, p.10-12, rus; 41-4506
- Improving the reliability of 204M excavators under northern conditions. Osipova, T.V., et al, 1986, p.11-16, rus; 41-4525
- Rubber-modified pavements for ice control in Alaska. Paulson, A., 1987, 2p., eng; 41-4578
- Studying shear strength of ash-slag wastes from thermal power plants located in the Northern climatic zone. Ogarkov, A.A., 1987, p.75-78, rus; 41-4624
- See also specific types of materials
- Construction sites**
- All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings, 1985, 126p., rus; 41-1362
- Thermal and moisture regimes of clay soils in aeration zones of construction sites in the Far East and the prevention of flooding. Fedorov, V.I., 1985, p.93-104, rus; 41-1364
- Mobile power plants used in northern and remote regions. Taits, V.G., 1986, p.31-34, rus; 41-1536
- See also: Site surveys
- Construction standards**
- See: Building codes
- Containers**
- See: Tanks (containers)
- Continental ice**
- See: Land ice
- Continental shelves**
- Modeling high-velocity winds and low air temperature over seas. Koshinskii, S.D., et al, 1986, p.90-107, rus; 41-1972
- Ice distribution in Arctic seas of the North American shelf. Smirnov, V.I., 1986, p.35-40, rus; 41-4194

**Continuous permafrost**

- Hydrologic investigations in the Mimer River basin (Spitsbergen) in 1983. Gokhman, V.V., et al, 1986, p.161-166, rus; 41-127
- Estimating the productivity of northern taiga forests in Siberia. Mitrofanov, D.P., 1984, p.95-102, rus; 41-1082
- Origin of some buried ice forms in the Yamal tundra. Krass, M.S., et al, 1986, p.66-75, rus; 41-1793
- Yeasts from Arctic East Siberian tundra. Golubev, V.I., 1986, p.609-612, rus; 41-1825
- Heterotrophic bacteria from soils of Arctic East Siberian tundra. Velikova, V.L., 1986, p.613-616, rus; 41-1826
- Project of the experimental Yamberg ice-core dam. Danielian, I.U.S., et al, 1986, p.183-189, rus; 41-2175
- Age and evolution of soils in the USSR. Ivanov, I.V., ed, 1986, 230p., rus; 41-2352
- Buried soils of northeastern Yakutia (the Khallerchinskaya tundra). Fominykh, L.A., et al, 1986, p.109-120, rus; 41-2354
- Building stone-earth-fill dams in the North. Kogodovskii, O.A., 1986, p.171-182, rus; 41-3460
- Underground hydraulic structures in permafrost. Gevirtz, G.I.A., et al, 1986, p.190-197, rus; 41-3462
- Riverbank erosion in the Colville Delta, Alaska. Walker, J., et al, 1987, p.61-70, eng; 41-3555
- Hydrological investigations in the Mimer River basin, Svalbard, in 1983. Gokhman, V.V., et al, 1986, p.309-316, eng; 41-3622
- Drilling complex for the Far North. Safiullin, M.N., et al, 1986, p.30-31, rus; 41-3773
- Massive ground ice and geology in continuous permafrost. Dallimore, S.R., et al, 1987, p.913-918, eng; 41-4016
- Possibilities of the landscape-indication method for engineering-geological studies of northern West Siberia. Bondarik, G.K., et al, 1987, p.15-29, rus; 41-4621
- Convection**
- On free convection melting of a solid immersed in a hot dissimilar fluid. Chen, M.M., et al, 1986, p.1087-1093, eng; 41-393
- Heating by organized convection as a source of polar low amplification. Ökland, H., 1986, p.161-176, eng; 41-1804
- Effect of natural convection on ice crystal growth rates in salt solutions. Huang, J.S., et al, 1985, p.747-752, eng; 41-2333
- Convective flows of cold water over a flat surface. Jang, J.Y., et al, 1987, p.85-89, eng; 41-2406
- Investigation of melting ice in an isothermal horizontal cylinder. Riviere, P., et al, 1987, p.155-165, eng; 41-2881
- Formation and melting of a vertical ice slab in an enclosure. Sorour, M.M., et al, 1987, p.167-177, eng; 41-2882
- Recurring polynyas over the Cosmonaut Sea and the Maud Rise. Comiso, J.C., et al, 1987, p.2819-2833, eng; 41-3080
- Laboratory investigation of the melting of ice by induced convection. Bogorodskii, V.V., et al, 1986, p.94-96, eng; 41-3682
- Cooling**
- Bridge construction under severe climatic conditions. Veinblat, B.M., et al, 1986, p.9-11, rus; 41-1887
- Effects of density change and subcooling on the melting of a solid in a rectangular enclosure. Kassinos, A., et al, 1986, p.1787-1792, eng; 41-3296
- See also: Thermopiles
- Cooling rate**
- Calculating mean temperature of concrete during the cooling of structures. Golovnev, S.G., et al, 1986, p.126-130, rus; 41-2759
- Initial cooling of hot-mix asphalt concrete mats. White, S., et al, 1987, p.117-146, eng; 41-4023
- Cooling systems**
- Recommendations for the design and construction of geocryogenic coolers. Kuz'min, G.P., et al, 1986, 66p., rus; 41-3329
- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed, 1986, 120p., rus; 41-3385
- Improving the performance of cooling systems on ice navigating ships. Aksel'rod, S.B., 1986, p.23-31, rus; 41-3388
- Pneumatic conveying of ice into deep mines. Correia, R.M., et al, 1987, p.155-167, eng; 41-4329
- Cooperation**
- See: International cooperation
- Core analysis**
- See: Drill core analysis
- Core samplers**
- Development of a frazil ice sampler. Brockett, B.E., et al, 1986, 12p., eng; 41-3257
- See also: Ice coring drills
- Cores**
- Amundsen Sea sediment coring. Kellogg, T.B., et al, 1985, p.79-81, eng; 41-2635
- See also: Ice cores

**Corona discharge**

- Anomalous streamer discharge in air with supercooled steam and its luminescence. Voltsekhovskii, M.B., 1986, p.351-354, rus; 41-1628
- Corrosion**
- Corrosion of offshore reinforced concrete structures. Jensen, F.O., 1986, p.405-413, eng; 41-360
- Designing for automotive corrosion prevention. 1978, 132p., eng; 41-377
- Winter maintenance practice and research in Ontario. Fromm, H.J., 1978, p.1-4, eng; 41-378
- Chemistry of the automotive environment. Baboian, R., 1978, p.14-23, eng; 41-380
- Salting practices—trends and issues. Swets, D.H., 1978, p.128-132, eng; 41-381
- Waterproofing and corrosion prevention in hydraulic structures. Shchavalev, N.F., ed, 1985, 100p., rus; 41-431
- Canadian Beaufort: a corrosive extreme. Lingnau, D.G., 1986, p.45-51, eng; 41-2740
- Parking garage problem. Litvan, G.G., 1985, p.214-218, eng; 41-3192
- Chemical solutions to the chemical problem. Minak, L.D., 1985, p.238-244, eng; 41-3194
- Corrosive deicing chemicals and winter road maintenance. Nottingham, D., et al, 1983, 35p., eng; 41-4607
- Cosmic dust**
- Placers of cosmic dust in the blue ice lakes of Greenland. Maurette, M., et al, 1986, p.869-872, eng; 41-1070
- Solar energetic ions and interplanetary grains. Strazzulla, G., et al, 1985, p.273-285, eng; 41-1707
- Effect of dust halos and dust mantles on nuclear outgassing. Mendia, D.A., 1985, p.487-504, eng; 41-1720
- Cost analysis**
- Analyzing transportation costs of modular construction objects in permafrost regions. Rastorguev, G.A., 1986, p.19-20, rus; 41-1527
- Soviet research station disappears. Fresco-Mayoux, A., 1986, p.61-63, fre; 41-2018
- Managing budgets for snow control. Fisher, K.J., 1987, p.28-37, eng; 41-3415
- Hot sand for improved traction on icy roads. Reckard, M.K., 1985, 7p., eng; 41-4000
- Life cycle costing of paved Alaskan highways. Volume 1. Kulkarni, R., et al, 1982, 76p., eng; 41-4069
- Ice prediction package cuts costs on Cheshire's gritting operation. 1987, p.20-22, eng; 41-4331
- See also: Economic analysis
- Countermeasures**
- Avalanches and countermeasures, Vail, Colorado. Oaks, S.D., et al, 1987, p.157-168, eng; 41-4127
- See specific types of countermeasures
- Crack propagation**
- Frost damage and prevention in hydraulic structures. Qi, Z., et al, 1986, p.299-304, chi; 41-1435
- Resistance of massive concrete structures to thermal cracking. Trapeznikov, L.P., 1986, 271p., rus; 41-1986
- Ice wedge growth at Illisavik experimental drained lake site. Mackay, J.R., 1986, p.1782-1795, eng; 41-2963
- Preliminary measurements of terminal crack velocity in ice. Parsons, B.L., et al, 1987, p.233-238, eng; 41-3034
- Crack growth through asphalt overlays due to thermal stresses. Joseph, P., et al, 1987, p.453-491, eng; 41-4032
- Conditions for crack propagation by frost wedging. Tharp, T.M., 1987, p.94-102, eng; 41-4210
- Cracking (fracturing)**
- Note on ice scaling. Jones, N., 1986, p.134-135, eng; 41-259
- Polyethylene-modified bitumen for paving applications. Jew, P., et al, 1986, p.2685-2704, eng; 41-829
- Study of buried-pipe failures in cold climates. Bahmanyar, G.H., 1982, 205p., eng; 41-900
- Effect of asphalt concrete overlays on cracking in cement concrete. Janssen, D.J., 1985, 186p., eng; 41-986
- Frost crack of buildings and its treatment methods in cold regions. Tang, S., 1986, p.275-280, chi; 41-1430
- Analysis about frost-crack damage of retaining wall. Xia, Z., 1986, p.281-286, chi; 41-1431
- Steel plates for low temperature uses. Yamada, M., et al, 1984, p.28-38, eng; 41-1569
- Resistance of massive concrete structures to thermal cracking. Trapeznikov, L.P., 1986, 271p., rus; 41-1986
- Factors affecting the cracking of asphalt concrete pavements. Ruth, B.E., et al, 1986, p.96-109, eng; 41-2202
- Acoustic emission study on multi-year sea ice in an arctic field laboratory. Sinha, N.K., 1985, p.S290-S293, eng; 41-2309
- Freeze-thaw durability of concrete with and without silica fume. Pigeon, M., et al, 1986, p.76-85, eng; 41-2897
- Durability of concrete bridges in Belgium—balance of the systematic inspection. Van Begin, C., 1987, p.541-554, eng; 41-3700

- Cracking due to frost action in Portland cement concrete pavements—a literature survey. Sawan, J., [1987, p.781-803, eng] **41-3706**
- Selection of paving asphalt cements for low temperature service. Robertson, W.D., [1987, p.41-82, eng] **41-4021**
- Changes in properties of asphalt concretes due to aging. Sato, K., et al, [1987, p.85-116, eng] **41-4022**
- Paving asphalt temperature susceptibility. McLeod, N.W., [1987, p.147-240, eng] **41-4024**
- Cold climate performance of Canadian airport pavements. Haas, R., et al, [1987, p.303-332, eng] **41-4027**
- Results of laboratory tests on AMIR compacted asphalt slabs. El Halim, A.O., et al, [1987, p.417-451, eng] **41-4031**
- Investigation of reparation for thermal cracking in asphalt pavements. Kubo, H., et al, [1987, p.493-510, eng] **41-4033**
- Factor analyses of damage modes of asphalt pavements. Fukuda, T., et al, [1987, p.511-523, eng] **41-4034**
- Crack sealing compounds in winter. Lupien, C., et al, [1987, p.689-718, eng] **41-4040**
- Airport pavement distress in cold regions. Vinson, T.S., et al, [1987, p.981-1012, eng] **41-4050**
- Exposure tests at Treat Island. Smith, R.J., [1987, p.48-53, eng] **41-4175**
- Ice-sheet failure against inclined and conical surfaces. Kaldjian, M.J., [1987, p.145-152, eng] **41-4176**
- See also: Ice cracks
- Cracks**
- Stresses and strains originating in structures near cracks. Terekhova, T.A., [1985, p.55-57, rus] **41-303**
- Cranes (hoists)**
- Mobile hydraulic crane KMTS-10. Vil'ner, A.D., [1986, p.37-38, rus] **41-438**
- Finland to build ice-breaking cargo ships and snow-going vehicles. [1985, p.100-102, rus] **41-1521**
- Cranes (Hoists)**
- Ship for scientific expeditions to Antarctica. Seppanen, E., [1987, p.244-246, rus] **41-4148**
- Creep**
- Studying cryogenic processes at research institutes. Ivanovskii, L.N., et al, [1986, p.136-149, rus] **41-1202**
- Naturally occurring creep in ice-rich permafrost. Savigny, K.W., [1980, 355p., eng] **41-4596**
- See also: Ice creep; Rheology; Snow creep; Soil creep
- Crevasse**
- Surface features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al, [1986, p.168-170, eng] **41-411**
- Mapping of Soler Glacier, Chile. Aniya, M., et al, [1986, p.8-10, eng] **41-729**
- Discussion on crevasse in frozen earth. Pang, G., [1986, p.287-290, chi] **41-1432**
- Man vs. McKinley. Dixon, C., et al, [1986, p.2-8, eng] **41-1841**
- Glacier training. Hook, C., [1986, p.11, eng] **41-1842**
- JARE-27 field report, Sør Rondane Mountains, 1986. Moriawaki, K., et al, [1986, p.246-281, jpn] **41-2695**
- Ice streams draining into the Ross Ice Shelf. Shabtaie, S., et al, [1987, p.1311-1336, eng] **41-3764**
- Crossings**
- See: Bridges; Ice crossings; River crossings
- Crude oil**
- Impact of oilfield development on shorebirds, Prudhoe Bay, Alaska. Meehan, R.H., [1986, 92p., eng] **41-2287**
- Crude oil storage facility in the Arctic. Philippi, H.L., et al, [1987, p.63-67, eng] **41-2403**
- Crustal structure**
- See: Earth crust; Tectonics
- Cryobiology**
- Ice algae in sea ice near Davis Station, Antarctica. Yu, J., et al, [1986, p.66-71, chi] **41-401**
- Nanoplankton in the waters near Davis Station. Mao, X., et al, [1986, p.130-135, chi] **41-404**
- Rapid and high pressure freezing techniques in cryobiology. Menco, B.P.M., [1986, p.177-240, eng] **41-1014**
- Organism losses during sea ice melting. Garrison, D.L., et al, [1986, p.237-239, eng] **41-1016**
- Vegetation of snow patches, Gulf of Richmond, northern Quebec. Morin, H., et al, [1986, p.1515-1524, fr] **41-2367**
- Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover. McGrath Grossi, S., et al, [1987, p.153-164, eng] **41-3131**
- Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microalgal communities. Palmisano, A.C., et al, [1987, p.165-173, eng] **41-3132**
- Antifreeze glycoproteins from polar fish blood. Feeney, R.E., et al, [1986, p.59-78, eng] **41-3165**
- Method for the continuous monitoring of snow: application to the cryptoendolithic microbial community of Antarctica. Friedmann, E.I., et al, [1985, p.179-181, eng] **41-3322**
- Ecology of snow algae. Kawecka, B., [1986, p.407-415, eng] **41-3360**
- Ice diatom floras in Arthur Harbor. Krebs, W.N., et al, [1987, p.163-171, eng] **41-3427**
- Sea ice meiofauna at Showa Station. Hoshiai, T., et al, [1986, p.118-124, eng] **41-3634**
- Intracellular photosynthate allocation and the control of Arctic marine ice algal production. Smith, R.E.H., et al, [1987, p.124-132, eng] **41-3998**
- Seasonal variation in phytoplankton and ice algae in shallow coast site. Perrin, R.A., et al, [1987, p.33-46, eng] **41-4084**
- Ice flora in the central part of the Arctic Ocean. Mel'nikov, I.A., [1986, p.59-62, rus] **41-4197**
- Cryogenic processes**
- See: Geocryology
- Cryogenic soils**
- Climate and vegetation of Primor'e as affected by Pleistocene glaciation. Shumova, G.M., et al, [1986, p.157-161, rus] **41-126**
- Types of landscapes in the Karelian ASSR. Volkov, A.D., et al, [1985, p.4-16, rus] **41-190**
- Phytocenotic and ecologic peculiarities of forest types prevailing in different landscapes of central taiga. Shelekhov, A.M., et al, [1985, p.38-45, rus] **41-192**
- Strategy of geochemical exploration in the taiga zone. Tauson, L.V., [1986, p.10-14, rus] **41-198**
- Environmental protection in Central Yakutia (Collection of scientific papers). Vozin, V.F., ed, [1985, 143p., rus] **41-253**
- Changes in vegetational cover induced by human factors. Nakhbiseva, S.F., et al, [1985, p.3-14, rus] **41-254**
- Improving thermal regime of meadow soils. Strel'tsova, V.S., et al, [1985, p.14-26, rus] **41-255**
- Oil spill impacts on meadow soils. Oderusova, T.G., [1985, p.27-31, rus] **41-256**
- Agricultural development of landscapes containing ground ice in Central Yakutia. Turbina, M.I., [1985, p.31-42, rus] **41-257**
- Studying soils and ground in the central BAM area. Vasilenko, N.G., et al, [1986, p.104-118, rus] **41-425**
- One hundred years of genetic pedology. Kovda, V.A., ed, [1986, 276p., rus] **41-521**
- Recent cryological problems of the Dokuchaev pedology. Makeev, O.V., et al, [1986, p.118-125, rus] **41-522**
- High altitude flora of northern Tien Shan. Baltenov, M.S., [1985, 231p., rus] **41-551**
- Scheme for predicting flood runoff for unstudied rivers of Eastern Siberia. Pitenkov, A.V., [1986, p.37-45, rus] **41-599**
- Dynamics and hydrophysical properties of forest litter in the Krasnoyarsk forest steppes. Stakanov, V.D., et al, [1986, p.172-176, rus] **41-816**
- Snow physics, avalanches, mudflows. Bolov, V.R., ed, [1985, 108p., rus] **41-836**
- Winter factors in seasonal development of Alpine plants. Lynov, I.U.S., [1986, p.78-80, rus] **41-903**
- Plants in the Anadyr' River basin. Korobkov, A.A., et al, [1986, p.450-459, rus] **41-989**
- Photosynthesis of steppe plants in eastern Hangay. Slemnev, N.N., [1986, p.460-473, rus] **41-990**
- Algal groupings in Alpine steppes of northeastern Asia. Pivovarova, Zh.F., [1986, p.521-527, rus] **41-992**
- Development of soil algae in felled areas of northern taiga. Antipina, G.S., [1986, p.794-798, rus] **41-1004**
- Meadow-chernozem cryogenic soils of the Buryat SSR. Kulikov, A.I., et al, [1986, 137p., rus] **41-1045**
- Productivity of forest phytocenoses. Elagin, I.N., ed, [1984, 149p., rus] **41-1078**
- Fire effect on Siberian forests. Evdokimenko, M.D., [1984, p.56-65, rus] **41-1080**
- Differentiation in forest conditions of mountain regions and phytocenotic productivity. Ziganshina, R.A., [1984, p.78-87, rus] **41-1081**
- Flora of the Kanin Peninsula. Sergienko, V.G., [1986, 147p., rus] **41-1084**
- Southern tundras of Taymyr. Chernov, I.U.I., ed, [1986, 208p., rus] **41-1331**
- Chemical composition of tundra soils in western Taymyr. Chugunova, M.V., [1986, p.169-173, rus] **41-1340**
- Forestry in permafrost regions. Pozdniakov, L.K., [1986, 192p., rus] **41-1343**
- Carbon dioxide gas exchange components of tundra plants at various temperatures. Lediakina, N.A., et al, [1986, p.1067-1073, rus] **41-1455**
- Plant distribution in nival communities of the Chukotskiy Peninsula. Razzhivin, V.I.U., [1986, p.1088-1097, rus] **41-1456**
- Progress in pedology. Contributions of Soviet pedologists to the 13th International Congress of Pedologists, Hamburg, 1986. Kovda, V.A., ed, [1986, 270p., rus] **41-1743**
- Temperature field and annual heat cycles in soils. Makeev, O.V., et al, [1986, p.27-31, rus] **41-1744**
- Salt transfer processes in cryogenic soils. Panin, P.S., et al, [1986, p.245-250, rus] **41-1745**
- Glacial and periglacial investigations in Skidadalum, Tröllaskagi, Northern Iceland. Müller, H.-N., et al, [1986, p.1-18, eng] **41-1788**
- Man-induced erosion in Bol'shezemel'skaya tundra. Zharkova, I.U.G., [1986, p.94-98, rus] **41-1794**
- Chemical element balance in the end-moraine landscapes of southern taiga. Shitikova, T.E., [1985, p.104-113, rus] **41-1818**
- Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., [1986, p.49-67, rus] **41-1822**
- Yeasts from Arctic East Siberian tundra. Golubev, V.I., [1986, p.609-612, rus] **41-1825**
- Heterotrophic bacteria from soils of Arctic East Siberian tundra. Velikova, V.L., [1986, p.613-616, rus] **41-1826**
- Introduction of aconites into the Subarctic. Gorelova, A.P., [1986, 116p., rus] **41-1927**
- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). [1986, 126p., rus] **41-2213**
- Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al, [1986, p.72-80, rus] **41-2250**
- Development of taiga forests. Savina, L.N., [1986, 189p., rus] **41-2258**
- Fir trees. Krylov, G.V., et al, [1986, 238p., rus] **41-2259**
- Lichen pine forests. Listov, A.A., [1986, 181p., rus] **41-2288**
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] **41-2289**
- Kolovriv forest (ecological investigations). Sokolov, V.E., ed, [1986, 126p., rus] **41-2345**
- Age and evolution of soils in the USSR. Ivanov, I.V., ed, [1986, 230p., rus] **41-2352**
- Modern concept of soil cryogenesis, the evolution of cryogenic soils in Holocene and problems of land reclamation in the presence of permafrost. Makeev, O.V., [1986, p.37-46, rus] **41-2353**
- Buried soils of northeastern Yakutia (the Khallerchinskaya tundra). Fominykh, L.A., et al, [1986, p.109-120, rus] **41-2354**
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed, [1986, 198p., rus] **41-2373**
- Clear-felling impact on properties of sandy podzols in northern Karelia. Lazareva, I.P., et al, [1986, p.61-79, rus] **41-2376**
- All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks, Novosibirsk, Aug. 26-28, 1986. Summaries. [1986, 165p., rus] **41-2456**
- Mixed-grass-edge tundra soils of Wrangel Island. Orlovskii, S.-D.D., [1986, p.98, rus] **41-2460**
- Impact of ejecta from coal-fueled power plants on paludal north-taiga pine forests. Alekseev, V.A., et al, [1986, p.664-672, rus] **41-2562**
- Brio-lichenologic investigations in the USSR. Shliakov, R.N., ed, [1986, 118p., rus] **41-2775**
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilibinev experimental forest taken as an example). Zubareva, R.S., ed, [1986, 158p., rus] **41-2873**
- Characteristics of forest resources and their use in the Bilibinev experimental and model forest. Smolonogov, E.P., et al, [1986, p.3-15, rus] **41-2874**
- Natural revegetation of subpolar mountain areas affected by industry. Martynenko, V.A., [1986, p.1663-1668, rus] **41-3026**
- Pale yellow soils of the central Siberian Plateau. Sokolov, I.A., [1986, p.25-38, rus] **41-3083**
- Ground ice in western Siberia. Groseval'd, M.G., et al, [1986, p.173-183, eng] **41-3197**
- Ground water regime and runoff in Siberian taiga. Konstantinov, V.D., [1986, p.14-22, rus] **41-3209**
- Hydrothermal regime of taiga and tundra soils of northeastern Europe. Kononenko, A.V., [1986, 145p., + inserts, rus] **41-3246**
- Geophysics and man-induced changes of landscapes in the Chukotskiy Peninsula. Ignatenko, I.V., et al, [1987, 271p., rus] **41-3247**
- Scientific-technological progress and the development of northern natural resources. Chistobae, A.I., et al, [1985, p.42-51, rus] **41-3435**
- Rational use and preservation of ecosystems in the North. P'yavchenko, N.I., [1985, p.68-75, rus] **41-3437**
- Remote sounding and interpretation of cryo-hydro-geochemical anomalies. Makarov, V.N., et al, [1986, p.133-144, rus] **41-3494**
- All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports. Sokolov, V.E., ed, [1986, 154p., rus] **41-3539**
- Peculiarities of microbe associations in the Far North and Pamir highlands. Bab'eva, I.P., et al, [1986, p.12-13, rus] **41-3540**
- Microbe associations of Arctic soils. Parinkina, O.M., [1986, p.101-103, rus] **41-3542**
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, [1987, 166p., rus] **41-3649**
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, [1987, p.4-65, rus] **41-3650**
- Vegetation of Mabel and Guker islands (Franz Josef Land archipelago). Safronova, I.N., [1986, p.51-63, rus] **41-3866**
- Using spaceborne photography data in studying forests and swamps. Gorozhankina, S.M., [1986, p.169-189, rus] **41-3973**

**Cryogenic soils (cont.)**

- All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] 41-3974
- Regionalization of the permafrost zone for environmental protection purposes. Chizhov, A.V., et al, [1986, p.39, rus] 41-3975
- Revegetation of West Siberian forests. Vorob'ev, V.N., ed, [1985, 103p., rus] 41-3979
- Revegetation of cleared areas in pine forests of southern Priob'e under conditions of increased human activities. Bekh, I.A., [1985, p.4-11, rus] 41-3980
- Protective forest strips in cold dry steppes. Lamin, L.A., [1985, p.79-87, rus] 41-3981
- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. [1986, 166p., rus] 41-4060
- Stability of tundra landscapes under transport loads. Zimov, S.A., et al, [1986, p.22-23, rus] 41-4063
- Soil climate in southeastern West Siberia. Az'muka, T.I., et al, [1984, p.26-31, rus] 41-4088
- Thermal properties of cryogenic meadow-chenozem soils. Kulikov, A.I., [1984, p.126-130, rus] 41-4090
- Biologic activity of forest soils. Korsunov, V.M., ed, [1985, 122p., rus] 41-4109
- Microflora in forest soils of the Lower Angara depression. Vishniakova, Z.V., et al, [1985, p.88-101, rus] 41-4112
- Soil-melioration studies in Karelia. Nesterenko, I.M., ed, [1986, 144p., rus] 41-4115
- Peat mineralization in Kola Peninsula and southern Karelia. Pereverzev, V.N., et al, [1986, p.64-72, rus] 41-4116
- Calcium in the peat soils of northern Europe. Sin'kevich, E.I., [1986, p.72-84, rus] 41-4117
- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed, [1985, 160p., rus] 41-4118
- Thermal regime of upper soil layers in the Kolyma Basin. Alfimov, A.V., [1985, p.9-29, rus] 41-4119
- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus] 41-4120
- Heat balance of the non-chenozem zone of Russia. Nesmelova, E.I., et al, [1987, p.54-60, rus] 41-4168
- Development of spot medallions and circular fractures on their surface. Pukemo, M.N., [1987, p.85-89, rus] 41-4170
- Cryosphere and the zonality of soil melioration processes. Mel'nikov, P.I., et al, [1986, p.94-98, rus] 41-4468
- Problems of origin and geography of soils. Liverovskii, I.U.A., [1987, 248p., rus] 41-4555
- Micromorphological characteristics of humus profile in loamy taiga soils. Rusanova, G.V., [1986, p.69-77, rus] 41-4564
- Humus profiles in the paludified loamy podsoils of taiga. Vtiurin, G.M., [1986, p.78-88, rus] 41-4565
- Bioindications of natural environments in the North. Kriuchkov, V.V., [1987, p.60-67, rus] 41-4568
- Cryogenic structures**
- Thermal behavior of a cryogenic storage pilot station. Cames-Pintaux, A.M., et al, [1986, p.105-114, eng] 41-1281
- Glacial and periglacial investigations in Skidadalum, Tröllaskagi, Northern Iceland. Müller, H.-N., et al, [1986, p.1-18, eng] 41-1788
- Pleistocene glaciations in East Asia. Bessalyt, V.G., ed, [1984, 212p., rus] 41-1910
- Peculiarities of studying the Pleistocene Edoma series of the northeastern USSR. Tomirdiro, S.V., et al, [1984, p.159-173, rus] 41-1912
- Composites for cryogenic dewars and instruments. Morris, E.E., [1982, p.95-109, eng] 41-1990
- Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka). Kotov, A.N., et al, [1986, p.114-120, rus] 41-2091
- Experimental studies of injected ice formation in fine-grained rocks. Ershov, E.D., et al, [1986, p.136-149, rus] 41-2094
- Cryogenic structure of active layer rocks in Yamal Peninsula. Ershov, E.D., et al, [1986, p.149-162, rus] 41-2095
- Cryogenic structure of linear weathering crusts in the Stanovoi Range. Mikhaev, S.M., et al, [1986, p.74-78, rus] 41-2822
- Cryogenic processes in the formation of swamp microrelief. Maksimova, L.N., et al, [1986, p.147-151, rus] 41-2833
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] 41-3249
- Thermal break-up of frozen cohesive rocks. Mochalov, V.I., et al, [1986, p.68-69, rus] 41-3765
- Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] 41-3771
- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus] 41-4120
- Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., [1986, 78p., rus] 41-4523
- Cryogenic textures**
- Cryogenic structure of active layer rocks in Yamal Peninsula. Ershov, E.D., et al, [1986, p.149-162, rus] 41-2095

- Pseudomorphs of wedge ice in the Mayn River valley (Central Chukotskiy Peninsula). Kotov, A.N., [1986, p.54-62, rus] 41-2544
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] 41-3249
- Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] 41-3771
- Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., [1986, 78p., rus] 41-4523
- Cryogenics**
- Dynamic testing of a cryogenic heat pipe/radiator. Cenknner, A.A., Jr., et al, [1978, p.105-110, eng] 41-469
- Behavior of lightweight concretes at cryogenic temperatures. Berner, D.E., et al, [1985, p.439-445, eng] 41-890
- Behavior of graphite/polyimide composites at extreme temperatures. Garber, D.P., et al, [1982, p.73-91, eng] 41-1989
- Cryopedology**
- See: Geocryology
- Cryoturbation**
- Micromorphology of soil during periglacial processes. Van Vliet-Lanoë, B., [1985, p.15-20, eng] 41-370
- Northern regions cryoturbation, Onion Portage, Alaska. Schweger, C., [1985, p.127-141, eng] 41-1358
- Glacial and periglacial investigations in Skidadalum, Tröllaskagi, Northern Iceland. Müller, H.-N., et al, [1986, p.1-18, eng] 41-1788
- Frost effects in soils. Van Vliet-Lanoë, B., [1985, p.117-158, eng] 41-2112
- Crystal growth**
- Thermocapillary free boundaries in crystal growth. Cuvelier, C., et al, [1986, p.1-26, eng] 41-826
- Zones and excitons of cryocrystals. Sobolev, V.V., [1986, 206p., rus] 41-997
- All-Union tutorial seminar on mathematical modeling in science and technology. Summaries. [1986, 333p., rus] 41-2381
- Heat and mass transfer during crystal growth from water solutions. Braflavskaya, V.A., et al, [1986, p.54-55, rus] 41-2382
- Buoyancy and surface tension driven natural convection with solidification. Munakata, T., et al, [1986, p.1733-1738, eng] 41-3292
- Cooling of a salt solution. Entov, V.M., et al, [1987, p.1344-1347, eng] 41-4164
- See also: Ice crystal growth; Snow crystal growth
- Crystal optics**
- See: Ice crystal optics
- Crystallization**
- See: Ice crystal growth; Recrystallization
- Crystallization nuclei**
- See: Ice crystal nuclei
- Crystals**
- Structure and dynamics of crystal-melt systems. Broughton, J.Q., et al, [1986, p.5749-5758, eng] 41-498
- Surface free energies of crystal-liquid systems. Broughton, J.Q., et al, [1986, p.5759-5768, eng] 41-499
- Zones and excitons of cryocrystals. Sobolev, V.V., [1986, 206p., rus] 41-997
- Capacitance bridge for low-temperature dielectric measurements. Foote, M.C., et al, [1987, p.130-132, eng] 41-1866
- Freezing and interfaces: density functional theories in two and three dimensions. Haymet, A.D.J., [1986, p.1-32, eng] 41-2810
- Freezing. Haymet, A.D.J., [1987, p.1076-1080, eng] 41-3409
- Role of gas-liquid inclusions in cryogenic shattering of quartz. Rogov, V.V., [1987, p.81-85, rus] 41-4169
- See also: Ice crystals; Snow crystals
- Cable ice**
- Difference in energy between cubic and hexagonal ice. Handa, Y.P., et al, [1986, p.7009-7010, eng] 41-188
- Vitrified liquid water to cubic ice phase transition. Hallbrucker, A., et al, [1987, p.503-505, eng] 41-3312
- Cubic ice from liquid water. Mayer, E., et al, [1987, p.601-602, eng] 41-3637
- Culverts**
- Passing spring meltwater when pipes are clogged by nalds. Dement'ev, V.A., [1986, p.16-17, rus] 41-511
- Design for an insulated foundation of culvert and sluice. Yu, B., et al, [1986, p.261-266, chi] 41-1427
- State of corrugated metal culverts during operation. Roik, G.S., et al, [1986, p.12-13, rus] 41-1531
- Flexible culverts in snow avalanche protection for roads. Ostlid, H., [1986, p.19-21, eng] 41-2262
- Interaction of gravel, surface drainage and culverts with permafrost. Brown, J., et al, [1984, 35p., eng] 41-4072
- Currents**
- See: Ocean currents; Tidal currents
- Cutting**
- See: Ice cutting
- Cyclones**
- See: Atmospheric disturbances

**Damage**

- Outline of avalanches in China. Wang, Y., et al, [1986, p.11-18, eng] 41-1300
- Wood damage accumulation by stochastic load models. Corotis, R.B., et al, [1986, p.2402-2415, eng] 41-2222
- Avalanches and countermeasures, Vail, Colorado. Oaks, S.D., et al, [1987, p.157-168, eng] 41-4127
- Dams**
- Concretes for high dams. Sudakov, V.B., ed, [1985, 101p., rus] 41-413
- Examples of dam construction in Siberia and the Far North. Kolmogorov, R.I., [1973, p.53-62, rus] 41-1276
- Ice movement velocity at localized water-level drops above spillway outlets. Raspopin, G.A., et al, [1986, p.71-74, rus] 41-1395
- Performance of the Zeya hydroelectric power plant dam during its initial period. Epifanov, A.P., et al, [1986, p.18-21, rus] 41-1919
- Ultrasonic tests of grouting quality in concrete dams. Ermoshin, V.M., et al, [1986, p.33-36, rus] 41-1922
- Concretes with unsorted sand-gravel for cold regions. Sadovich, M.A., et al, [1986, p.50-53, rus] 41-1924
- Resistance of massive concrete structures to thermal cracking. Trapeznikov, L.P., [1986, 271p., rus] 41-1986
- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., [1986, p.92-94, rus] 41-2161
- Stress-strain state of the Sayano-Sushenskoe dam during filling of the reservoir. Aleksandrovskaia, E.K., [1986, p.123-129, eng] 41-2713
- Experimental use of rolled concrete mixtures in freezing weather. Vasil'skii, V.V., et al, [1987, p.8-12, rus] 41-2798
- Passing of ice and construction wastes at the Kureyskaya site. Zal'tsman, O.M., et al, [1986, p.23-27, rus] 41-2865
- Design and construction of the socle part of the Kureyskaya channel dam. Makarov, V.A., et al, [1986, p.27-31, rus] 41-2866
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Determining heat conductivity coefficients of coarse grained materials used in embankment construction. Gorokhov, E.N., [1985, p.105-110, rus] 41-3130
- Thermal regime and stresses in concrete dams in permafrost areas. Epifanov, A.P., et al, [1987, p.35-37, rus] 41-3268
- Rational utilization and preservation of ground water in the Buryat ASSR. Rezanov, I.N., ed, [1986, 114p., rus] 41-3330
- Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR. Adushinov, A.A., [1986, p.52-59, rus] 41-3331
- Engineering geocryology in hydraulic construction. Bikanov, G.F., ed, [1986, 205p., rus] 41-3439
- Prospects and problems of hydraulic power construction in the North. Bikanov, G.F., [1986, p.5-12, rus] 41-3440
- Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000. Kudoiarov, L.I., [1986, p.13-23, rus] 41-3441
- Problems of engineering geocryology in hydraulic construction. Tsytovich, N.A., et al, [1986, p.23-29, rus] 41-3442
- Influence of temperature regime and ice content on deformation of embankments built of coarse-clastic soils. Gavrilov, A.N., [1986, p.44-53, rus] 41-3445
- Temperature and moisture regime of the Vilyuy power plant dam. Olovin, B.A., [1986, p.151-161, rus] 41-3458
- Construction of water-raising ice dams. Makarov, V.I., et al, [1986, p.161-171, rus] 41-3459
- Building stone-earth-fill dams in the North. Kogodovskii, O.A., [1986, p.171-182, rus] 41-3460
- Methods of acting on the state of stress of massive concrete hydraulic structures. Garkun, L.M., et al, [1987, 111p., rus] 41-4123
- Making concrete dams monolithic by cementing structural joints. Argal, E.S., [1987, 119p., rus] 41-4150
- Glacial floods and their control. Mochalov, V.P., et al, [1986, p.104-108, 216-219, rus] 41-4351
- Artificial drainage for prevention of glacial lake bursts. Nurkaditov, L.K., et al, [1986, p.108-110, 220-221, rus] 41-4352
- Calculating the burst and flooding of moraine-dammed glacial lakes. Keremkulov, V.A., et al, [1986, p.110-113, 221-224, rus] 41-4353
- Origin and evolution of Goes Lake, Spitsbergen. Grzes, M.G., et al, [1986, p.224-233, 234, rus] 41-4355
- See also: Earth dams; Ice dams
- Data processing**
- Composition and structure of the special data bank "Snow cover in mountains". Tsarev, B.K., [1986, p.3-10, rus] 41-770
- Proceedings [1986, 210p., eng] 41-966
- World Data Center A for Glaciology: activities and services. Brennan, A.M., [1986, p.131-138, eng] 41-971



- Data sensitivities of sea ice drift and ocean stress.** Walsh, J.E., et al, [1986, p.11,657-11,675, eng] 41-1023
- Photo-control tie of the SMP-32 to the MSU-S data and some reflection spectra characteristics of natural objects.** Dosov, V.N., et al, [1985, p.57-66, rus] 41-1040
- Interpolation of satellite data on seasonal snow line elevations within the mountain region limits.** Tsarev, B.K., [1986, p.59-65, rus] 41-1686
- Digital processing of radar images obtained from the satellite "Kosmos-1500".** Aamus, V.V., et al, [1986, p.37-57, rus] 41-2716
- Fit of statistical distributions to ice nuclei concentration data.** Pérez, P.J., et al, [1984, p.135-140, spa] 41-2749
- Comparison of Northern Hemisphere snow cover data sets.** Scialdone, J., et al, [1987, p.53-68, eng] 41-3341
- Analysis of NavSat buoy data from Beaufort Sea, 1980—primary results.** [1981, 136p., eng] 41-3381
- Analysis of NavSat buoy data from Beaufort Sea, 1980—detailed results.** [1981, 236p., eng] 41-3475
- Analysis of NavSat buoy data, Beaufort Sea, 1980, 271 fixes (part A).** [1981, 173p., eng] 41-3476
- Analysis of NavSat buoy data, Beaufort Sea, 1980—measurement variances.** [1981, 31p., eng] 41-3478
- Step frequency radar for the measurement of sea ice thickness.** Okamoto, K., et al, [1986, p.56-65, eng] 41-3658
- Data transmission**
- Composition and structure of the special data bank "Snow cover in mountains".** Tsarev, B.K., [1986, p.3-10, rus] 41-770
- Automatic weather station data for 1985.** Sievers, M.F., et al, [1986, 254p., eng] 41-877
- Analysis of NavSat buoy data from Beaufort Sea, 1980—primary results.** [1981, 136p., eng] 41-3381
- Analysis of NavSat buoy data, Beaufort Sea, 1980—271 fixes (part B).** [1981, 173p., eng] 41-3477
- Dating**
- See: Age determination**
- Decomposition**
- Decomposition of wood litter on felled areas of the North.** Kozlovskaya, L.S., et al, [1986, p.92-107, rus] 41-2378
- Soil-melioration studies in Karelia.** Nesterenko, I.M., et al, [1986, 144p., rus] 41-4115
- Deflation**
- See: Wind erosion**
- Deformation**
- Deformation properties of washed-up sands under permafrost conditions.** Bad'ianova, L.I., [1986, p.157-165, rus] 41-2835
- Seismo-acoustic studies of frozen and thawed calcareous clays.** Voronkov, O.K., et al, [1985, p.88-95, rus] 41-3129
- Sea ice dynamics. Mathematical models.** Timokhov, L.A., et al, [1987, 272p., rus] 41-3145
- Law observed in the generation of sound in ice samples subjected to loading.** Mitiaev, P.V., et al, [1986, p.168-169, rus] 41-3240
- Discussion of "Repeated load triaxial testing of frozen and thawed soils".** Yousef, H., [1986, p.221-225, eng] 41-3782
- See also: Ice deformation; Plastic deformation; Snow deformation**
- Defrosting**
- Anti-icing and deicing-defrosting fluids.** [1985, 13p., eng] 41-1762
- Heat pump control/defrost circuit.** Noland, J.R., [1983, 10 col., eng] 41-1983
- Control and method for defrosting a heat pump outdoor heat exchanger.** Saunders, J.F., et al, [1982, 14 col., eng] 41-1993
- Perfecting the methods of developing mineral deposits in the North.** Skuba, V.N., et al, [1986, 81p., rus] 41-4546
- Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams.** Mironov, V.P., et al, [1986, p.3-7, rus] 41-4547
- Degree days**
- Calculation of degree-days for glacier-climate research.** Braithwaite, R.J., [1984, p.1-8, eng] 41-621
- Deicing**
- See: Ice removal**
- Deltas**
- Productivity of natural meadows in the upper Angara River delta.** Kas'ianova, L.N., et al, [1986, p.78-83, rus] 41-1404
- Ice regimes of the lower Mackenzie River and Mackenzie Delta.** Terroux, A.C.D., et al, [1981, 64p. + append., eng] 41-2727
- Density (mass/volume)**
- Device for determining frost depth and density.** Huneidi, F., [1983, 4 col., eng] 41-1765
- Sea water density and submarine operation in the Arctic.** Frost, M.E., [1986, p.1-30, eng] 41-2653
- Buoyancy flux-driven cyclonic gyre in the Labrador Sea.** Seung, Y.-H., [1987, p.134-146, eng] 41-4278
- See also: Ice density; Snow density**
- Density (number/volume)**
- See: Ion density (concentration); Particle size distribution**
- Deposits**
- See: Glacial deposits; Lacustrine deposits; Marine deposits; Quaternary deposits; Sediments**
- Depth**
- See: Snow depth**
- Depth hoar**
- Method of calculating the warm-up date of snow cover.** Brukhanda, V.I., et al, [1986, p.10-23, rus] 41-771
- Distribution of depth hoar in Honshu, Japan.** Izumi, K., et al, [1986, p.198-206, jpn] 41-2603
- Influence of depth hoar on microwave emission from snow in northern Alaska.** Hall, D.K., [1987, p.225-231, eng] 41-3033
- Desalting**
- Vacuum freezing with multiple phase transformations.** Cheng, C.-Y., et al, [1983, 14 col., eng] 41-1674
- Studying the technology of building moorings of sea-water ice.** Ivanova, E.L., [1986, p.92-94, rus] 41-2161
- Experiments with desalting brines.** Sonovskii, A.V., et al, [1986, p.208-214, rus] 41-2180
- Different domains of application of cold.** Manual. Bykov, A.V., ed, [1985, 271p. (Pertinent p.: 42-66, 99-125, 222-260), rus] 41-3154
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia).** Panin, P.S., ed, [1984, 193p., rus] 41-4086
- Desert soils**
- Cryolithozone of Alpine deserts in Central Asia.** Gorbunov, A.P., [1986, p.100-104, rus] 41-114
- Problems of origin and geography of soils.** Liverovskii, I.U.A., [1987, 248p., rus] 41-4355
- Current problems in humus formation.** Archegova, I.B., ed, [1986, 172p., rus] 41-4563
- Deserts**
- Cryolithozone of Alpine deserts in Central Asia.** Gorbunov, A.P., [1986, p.100-104, rus] 41-114
- High altitude flora of northern Tien Shan.** Baltenov, M.S., [1985, 231p., rus] 41-551
- Alpine phytocenotic systems of the Subarctic.** Norin, B.N., ed, [1986, 292p., rus] 41-1344
- Relationship between salt weathering debris production and temperature.** Davison, A.P., [1986, p.335-341, eng] 41-1778
- Biological productivity of soil and plant formations in the USSR.** Bazilevich, N.I., [1986, p.49-67, rus] 41-1822
- Construction of electric power lines for main pipelines.** Manual. Arnopolin, A.G., et al, [1986, 164p. (Pertinent p.127-138), rus] 41-2890
- Natural associations of the Arctic and their protection.** Korotkevich, E.S., ed, [1986, 120p., rus] 41-3860
- Human factors in the development of basic Arctic geosystems.** Govorukha, L.S., [1986, p.24-30, rus] 41-3863
- Lacustrine and river geosystems of the Oktyabr'skaya Revolyutsiya Islands (Severnaya Zemlya).** Mordvinov, A.A., [1986, p.30-41, rus] 41-3864
- Soil formation on coastal plains of the Oktyabr'skaya Revolyutsiya Islands.** Govorenkov, B.F., [1986, p.41-51, rus] 41-3865
- Cryosphere and the zonality of soil melioration processes.** Mel'nikov, P.I., et al, [1986, p.94-98, rus] 41-4468
- Design**
- Physical modeling in ice engineering.** Ettema, R., [1986, p.57-65, eng] 41-1304
- Studying the influence of cutting speed and cutting-tool parameters on frozen ground excavation.** Sokolov, L.K., [1978, p.53-55, rus] 41-1321
- Rules for the classification and construction of sea-going ships.** [1986, 680p., eng] 41-1682
- Mobile dwellings for the North.** Saprykina, N.A., [1986, 215p., rus] 41-3012
- Reinforced concrete for petroleum industry structures of the Arctic Shelf.** Abadzhan, K.A., [1985, p.32-33, rus] 41-3205
- Regional characteristics of urban planning and construction in Siberia and the North.** Alekseeva, T.I., [1987, 208p., rus] 41-3804
- Regularities governing the development of forms of artificially frozen zones obtained by seasonally active freezing devices.** Koval'kov, V.P., [1983, p.58-71, rus] 41-4475
- Design criteria**
- Organization of construction under special environmental and climatic conditions.** Construction manual. Shakhparonov, V.V., et al, [1986, 255p., rus] 41-2862
- See also: Building codes**
- Detection**
- Acoustic navigation in research and production situations.** Hakala, H., [1986, p.145-161, eng] 41-1094
- Comparison of Northern Hemisphere snow cover data sets.** Scialdone, J., et al, [1987, p.53-68, eng] 41-3341
- Use of acoustics in localizing under-ice oil spills.** Francois, R.E., et al, [1983, 17p., eng] 41-3927
- See also: Ice detection**
- Deterioration**
- See: Ice deterioration**
- Deterium oxide**
- See: Heavy water**
- Development**
- See: Economic development**
- Dictionaries**
- International symbols for marine ice maps and nomenclature of marine ice.** [1986, 45p., rus] 41-1896
- Russian-English Arctic environment glossary.** [1985, 150p., rus] 41-1897
- Russian-English Arctic environment glossary.** [1987, 219p., eng] 41-2887
- Dielectric properties**
- Sensor for monitoring the dielectric constant of snow.** Mitzler, C., [1984, p.97-105, ger] 41-628
- Determination of the density and wetness of snow pack.** Sihvola, A., et al, [1986, p.717-721, eng] 41-851
- Thermodynamics of electrolyte solutions.** Beyer, R.P., et al, [1986, p.749-764, eng] 41-1553
- Structure and dielectric properties at 4.8 and 9.5 GHz of saline ice.** Arcone, S.A., et al, [1986, p.14,281-14,303, eng] 41-1857
- Electromagnetic processes accompanying water crystallization and ice deterioration.** Berri, B.L., et al, [1986, p.24-32, rus] 41-2149
- Dielectric properties of snow in the 3 to 37 GHz range.** Hallikainen, M.T., et al, [1986, p.1329-1340, eng] 41-2313
- Analysis of dielectric behavior of snow in 1.0 to 37.0 GHz frequency range.** Abdelrazik, M.A., [1985, 460p., eng] 41-2583
- Water effects on radiation induced microwave conductivity of frozen gels.** Eden, J., et al, [1987, p.51-56, eng] 41-2807
- Pulse radiolysis study of electrons in frozen alkaline solutions.** Czerwik, Z., et al, [1986, p.275-283, eng] 41-2811
- MIZEX 84 ice surface measurements from the FS Polarstern.** Burns, B.A., et al, [1986, p.30-40, eng] 41-3057
- Analysis of the tensor dielectric constant of sea ice at microwave frequencies.** Stogryn, A., [1987, p.147-158, eng] 41-3315
- Multiplicity of dielectric relaxation times of dispersed ice microcrystals.** Pissis, P., et al, [1987, p.195-211, eng] 41-4361
- Diesel engines**
- Icebreakers: fuel economy and safe navigation.** Bereznii, V., [1986, p.35-36, rus] 41-436
- BV 206—a vehicle for arctic transportation.** Ljunggren, J., [1986, p.1127-1137, eng] 41-1149
- Diesel engines designed for navigation in heavy ice.** [1985, p.70-73, rus] 41-1519
- Performance of diesel engine bearings at low temperature.** Grobuschek, F., [1986, p.477-486, ger] 41-2892
- Improving low temperature startability of M113 vehicles: automatic engine cycling tests.** Shankha, V.S., et al, [1987, 23p. + append., eng] 41-3813
- Diffraction**
- See: X ray diffraction**
- Diffusion**
- Self-similar solution of a problem of freezing of finely dispersed soils with allowance for moisture migration in thawed and frozen zones.** Ianitskii, P.A., [1986, p.264-270, eng] 41-2208
- Transport of water in frozen soil 6. Effects of temperature.** Nakano, Y., et al, [1987, p.44-50, eng] 41-3019
- See also: Thermal diffusion; Vapor diffusion**
- Discontinuous permafrost**
- Shallow building foundations on discontinuous permafrost.** Fedorov, V.I., et al, [1985, p.15-16, rus] 41-280
- Safety measures for operating buildings erected on Chita permafrost.** Orlov, V.O., et al, [1985, p.25-26, rus] 41-286
- Influence of surface conditions on surface temperature.** Kinney, T.C., et al, [1986, p.1-15, eng] 41-640
- Remarks on the origin of palsa frost mounds.** Jahn, A., [1986, p.123-130, eng] 41-1347
- Interactions between artificial lakes and permafrost.** Afanasenko, V.E., et al, [1986, p.120-127, rus] 41-2092
- Vertical electrical soundings in the vicinity of extended taliks.** Bolkov, S.A., et al, [1986, p.172-180, rus] 41-2098
- Polar gas project: structural design aspects.** Workman, G.H., [1986, p.116-125, eng] 41-2518
- Basic structures of the Kureyskaya hydroelectric plant.** Makarov, V.A., et al, [1986, p.11-17, rus] 41-2863
- Organizing construction of the Kureyskaya hydroelectric power plant.** Zaltsman, O.M., et al, [1986, p.17-23, rus] 41-2864
- Use of satellite information in studying distribution of discontinuous permafrost.** Dorofeev, I.V., et al, [1986, p.55-59, rus] 41-3518
- See also: Taliks**
- Dislocations (materials)**
- Dislocations in frozen, ice-containing, Pleistocene deposits of northern western Siberia.** Danilov, I.D., [1986, p.28-41, rus] 41-2816
- Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works).** Chochia, N.G., ed, [1986, 165p., rus] 41-3428
- Dislocations and permafrost development in the Pleistocene deposits of northern USSR.** Popov, A.I., [1986, p.146-153, rus] 41-3429

**Dispersions**

- Behaviour and fate of arctic oil spills. Bobra, A.M., et al., [1986, p.13-23, eng] 41-341
- Random transport of oil by sea ice. Colony, R., [1986, p.25-39, eng] 41-342
- Use of dispersants for oil spill countermeasures on arctic beaches. Owens, E.H., et al., [1984, p.324-337, eng] 41-895
- Chemically dispersed and untreated oils on arctic shores. Boehm, P.D., [1984, p.338-360, eng] 41-896
- Methods and equipment for obtaining artificial snow (granulated ice). Smorygin, G.I., et al., [1986, p.43-59, rus] 41-2153
- Dispersion in ice-covered lakes. Bengtsson, L., [1986, p.151-170, eng] 41-4516

**Distribution**

See: Permafrost distribution; Sea ice distribution; Snow cover distribution

**Disturbances**

See: Atmospheric disturbances

**Docks**

- Antarctic docking facility study carried out by Han-Padron Associates. [1986, n.p., eng] 41-214
- Ice management for year-round operating marine terminals. Tsinker, G.P., [1986, p.409-435, eng] 41-1110
- Floating dock. Gusev, V., [1986, p.18-19, rus] 41-1398

See also: Piers; Wharves

**Domes**

See: Pings

**Doped ice**

- EG/AD/S: a new type of model ice for refrigerated towing tanks. Timco, G.W., [1986, p.175-195, eng] 41-1288
- Dielectric studies of RbOH-doped ice and its phase transition. Kawada, S., et al., [1986, p.4485-4491, eng] 41-2468

**Drainage**

- Water protection structures at railroads. Dikarevskii, V.S., et al., [1986, 211p. (Pertinent p.123-211), rus] 41-517
- Glacial lake drainage near Söndre Strömfjord, West Greenland. Gordon, J.E., [1986, p.304, eng] 41-692
- Jamming of taiga rivers by fallen trees. Zemtsov, A.A., et al., [1986, p.101-107, rus] 41-813
- Allowing for physiographic factors in estimating maximum river runoff for the swampy forest zone of Priurys'ye. Trofimova, E.V., [1986, p.143-147, rus] 41-1372
- Evaluating the information content of satellite data on snow line altitude for forecasting runoff of mountain rivers in the Fergana Basin. Tsarev, B.K., [1986, p.40-50, rus] 41-1685
- Winter maintenance of roads. Popp, C., [1986, p.536-540, ger] 41-2324
- Changes in spring-flood runoff induced by forest swamp drainage. Pakutin, A.V., [1987, p.67-70, rus] 41-3082
- Freezing and thawing of drained peat soils in mountain forests. Chinc'iev, A.S., [1987, p.60-64, rus] 41-3737
- Development of swamps and paluded forests in western Siberia. Efremov, S.P., et al., [1986, p.26-29, rus] 41-3743
- Hydrological characteristics of Soler Glacier drainage, Patagonia. Fukami, H., et al., [1987, p.91-96, eng] 41-3832
- Interaction of gravel, surface drainage and culverts with permafrost. Brown, J., et al., [1984, 35p., eng] 41-4072
- Sub-drainage systems in cryogenic peat soils. Loginov, I.I., et al., [1984, p.51-52, rus] 41-4089
- Snow drain system—velocity formula for snow-laden water flow. Sato, T., et al., [1983, p.9-16, eng] 41-4133
- See also: Subglacial drainage; Subsurface drainage; Surface drainage
- Drains**
- Embankments built of water-logged earth with horizontal sand-drains. Vasil'ev, I.U.M., [1985, p.2-3, rus] 41-505
- Snow removal from roads by water flow in drains. Watanabe, Z., [1986, p.141-148, jpn] 41-1218
- Sub-drainage systems in cryogenic peat soils. Loginov, I.I., et al., [1984, p.51-52, rus] 41-4089
- Drake Passage**
- Travelling in antarctic weather. Junqueira Villela, R., [1986, p.42-55, por] 41-587
- Water masses and currents of the southern ocean. Whitworth, T., III, et al., [1987, p.6462-6476, eng] 41-3641
- Dredging**
- Methods of estimating economic losses from water pollution by dredging. Matveev, A.A., [1985, p.63-66, rus] 41-210
- Hydromechanization in construction of electric power plants. Shkundin, B.M., [1986, 224p. (pertinent p.156-174), rus] 41-619
- 1985 field studies, Beaufort and Chukchi Seas, conducted from the NOAA ship *Discoverer*. Miley, J.M., ed., [1986, 57p. + figs., eng] 41-831
- Arctic class hopper dredges. Brakel, J., et al., [1986, p.988-1000, eng] 41-1142

- Stability of hydraulically built-up construction sites under dynamic loads. Efremov, N.A., et al., [1986, p.29-31, rus] 41-1529
- Determining optimal parameters of thermal protection for dredging grounds. Rashkin, A.V., et al., [1986, p.214-217, rus] 41-2181
- For northern construction sites. Malyshev, A.I.A., [1986, p.49-50, rus] 41-2792
- Deformation properties of washed-up sands under permafrost conditions. Bad'ianova, L.I., [1986, p.157-165, rus] 41-2835
- Dredge-excavation of ground. Ogorodnikov, S.P., [1986, 256p., rus] 41-2913
- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed., [1986, 81p., rus] 41-4546
- Suction dredges used in placer mining of the North. Vinchenko, V.V., [1986, p.15-19, rus] 41-4550
- Arctic dredge spread. Machemehl, J.L., [1987, p.125-130, eng] 41-4633
- Drift**
- Ice on northern seas and wind in equatorial stratosphere. Sheremet'evskaya, O.I., [1986, p.128-131, rus] 41-120
- Nature of winter ruptures in sea ice covers. Gorbunov, I.U.A., et al., [1986, p.131-134, rus] 41-121
- Northern Hemisphere sea ice variability: observed and simulated. Walsh, J.E., [1986, p.3-20, eng] 41-143
- On the sea ice budget of the Greenland Sea. Moritz, R.E., [1986, p.21-58, eng] 41-144
- Sea ice conditions in the Labrador Sea-Grand Banks area. Zakrzewski, W.P., [1986, p.60-87, eng] 41-145
- Large-scale ice-ocean modeling. Hibler, W.D., III, [1986, p.165-184, eng] 41-148
- Statistical kinematics for the sea ice discontinuum. Thorndike, A.S., [1986, p.282-295, eng] 41-152
- Evaluation of the international ice patrol drift model. Murphy, D.L., et al., [1986, p.387-409, eng] 41-156
- Data on ice mechanics from remote sensing. Beaufort Sea. Gower, J.F.R., et al., [1986, p.509-522, eng] 41-162
- Sea ice drift measurements using satellite-tracking beacons. Nazarenko, D.M., et al., [1986, p.583-597, eng] 41-160
- Automatic Arctic profiling system for oceanography under ice. Van Leer, J.C., [1985, p.433-436, eng] 41-223
- Ice navigation studies in the Alaskan Arctic using POLAR class icebreakers. Brigham, L.W., et al., [1985, p.441-447, eng] 41-225
- Sea ice fields in the Barents Sea. Vinje, T.E., [1985, 26p. + map, eng] 41-247
- Sea ice and the Fairway Rock icefoot. Kovacs, A., et al., [1985, p.25-32, eng] 41-337
- Use of deuterium to trace the origin of drifting sea ice. Arnason, B., [1985, p.85-89, eng] 41-591
- High-precision distance measurement with an unmanned moving target. Ito, H., et al., [1986, p.93-95, eng] 41-746
- Ice drift tracing of water circulation in the Arctic. Kuz'mina, N.P., et al., [1984, p.20-32, eng] 41-818
- Ice air interaction theory for migration of marginal ice zone. Chu, P.C., [1986, p.863-883, eng] 41-869
- Ice islands as locations for arctic data collection. Sackinger, W.M., [1986, p.493-497, eng] 41-953
- Water masses and circulation of the southern ocean. Sarukhanian, E.I., et al., [1986, 288p., rus] 41-1013
- Data sensitivities of sea ice drift and ocean stress. Walsh, J.E., et al., [1986, p.11,657-11,675, eng] 41-1023
- Wind/wave tank tests of drifting iceberg models. McTaggart, K.A., et al., [1986, p.364-375, eng] 41-1107
- Ice balance of Lake Baykal during ice breakup. Moskalets, V.F., [1982, p.180-187, rus] 41-1277
- Added mass and damping coefficient for certain 'realistic' iceberg models. Bass, D.W., et al., [1986, p.163-174, eng] 41-1287
- Protection of structures from pressure of moving sea ice. Ice tests performed at the "Kerni I" lighthouse. [1985, p.19, rus] 41-1514
- Ice transport through the Fram Strait. Vinje, T., et al., [1986, 39p., eng] 41-1574
- Studying anomalously high ice drift velocities in Arctic seas. Kuznetsov, I.M., et al., [1986, p.57-60, eng] 41-1691
- Iceberg trajectory forecasting model for the Grand Banks, Newfoundland. De Margerie, S., et al., [1986, 86p., eng] 41-1836
- Quantitative evaluation of the role of near-shore ice in shoreline modification in the Okhotsk Sea. Stepanova, L.E., [1985, p.90-98, rus] 41-1909
- Bergy-bit motion due to wind, wave, current and Coriolis forces. Doyle, R., et al., [1984, p.182-198, eng] 41-1959
- Ice-seawater turbulent boundary layer interaction with melting or freezing. Mellor, G.L., et al., [1986, p.1829-1846, eng] 41-2219
- Ice alert levels for Arctic operations. Dunwoody, A.B., [1987, p.41-46, eng] 41-2400
- Prediction of short-term ice edge drift. El-Tahan, M., et al., [1987, p.393-400, eng] 41-2448
- Arctic sea ice extent and drift, modeled as a viscous fluid. Ling, C.-H., et al., [1986, p.71-98, eng] 41-2577
- Ice cover. Markham, W.E., [1986, p.101-116, eng] 41-2593

- Ice dynamics. Hibler, W.D., III, [1986, p.577-640, eng] 41-2995
- Short term motion analysis of icebergs in linear waves. Arunachalam, V.M., et al., [1987, p.247-258, eng] 41-3036
- Sea ice thickness distribution in the Arctic Ocean. Bourke, R.H., et al., [1987, p.259-280, eng] 41-3037
- Forecasting sea ice movement through Bering Strait. Kozo, T.L., et al., [1987, p.193-207, eng] 41-3079
- Dynamics of Iceberg Grounding and Scouring (DIGS) experiment. Lewis, C.F.M., [1986, p.129-131, eng] 41-3101
- Iceberg dynamics of the DIGS experiment. Lever, J., [1986, p.138-142, eng] 41-3103
- Comparison of boundary layer model with turbulent boundary layer. Myrhaug, D., [1987, p.135-148, eng] 41-3135
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al., [1987, 272p., rus] 41-3145
- Ocean-atmosphere interactions and climatic changes in Northern Hemisphere. Nikolaev, I.U.V., ed., [1986, 163p., eng] 41-3262
- Results of modeling high latitude climates. Nagurnyi, A.P., [1986, p.21-32, eng] 41-3263
- Studies of the upper sea layer beneath the ice edge. Ivanov, B.V., et al., [1986, p.146-150, eng] 41-3266
- Studying sea-atmosphere interactions during the cold season. Bogorodskii, P.V., et al., [1986, p.151-157, eng] 41-3267
- Determining some characteristics of fast and drifting ice with the meteorological radar-2 station. Komarov, A.V., et al., [1985, p.66-70, rus] 41-3430
- Sea ice concentration assessed from aerospace imagery. Aleksandrov, V.I.U., et al., [1987, p.181-189, eng] 41-3626
- Ice distribution in Arctic seas of the North American shelf. Smirnov, V.I., [1986, p.35-40, rus] 41-4194
- Ice movement according to the FGGE buoys. Losev, S.M., et al., [1986, p.77-88, rus] 41-4199
- Ice movement in the Arctic Ocean according to the FGGE Buoys. Gorbunov, I.U.A., et al., [1986, 96-103, rus] 41-4202
- Disturbances of the continuity of sea-ice covers in winter. Gorbunov, I.U.A., et al., [1986, p.110-116, rus] 41-4204
- Mapping mesoscale ocean structure within the interior marginal ice zone. Manley, T.O., et al., [1987, p.6837-6842, eng] 41-4241
- Turbulent transfer in a stratified oceanic boundary layer. McPhee, M.G., [1987, p.6977-6986, eng] 41-4254
- Mesoscale sea ice deformation in the East Greenland marginal ice zone. Leppäranta, M., et al., [1987, p.7060-7070, eng] 41-4261
- Sea ice drift near Bering Strait during 1982. Pease, C.H., et al., [1987, p.7107-7126, eng] 41-4265
- Pack-ice thickness from side-lapping satellite images. Feldman, U., [1987, p.69-71, eng] 41-4437
- Comparison of observed and modeled ice motion in the Arctic Ocean. Zwally, H.J., et al., [1987, p.136-144, eng] 41-4448
- Modelling of Labrador Sea pack ice, with an application to estimating geostrophic currents. Keliher, T.E., et al., [1987, p.161-176, eng] 41-4493
- Ice motion in Lake Erie. Campbell, J.E., et al., [1987, 22p., eng] 41-4577
- Effect of divergence on ice redistribution in the Arctic Ocean, revealed by space imagery analysis. Nazirov, M., [1987, p.30-36, rus] 41-4618
- See also: Snowdrifts
- Drift stations**
- Science program of the FRAM experiments in the Eastern Arctic Ocean. Baggeroer, A.B., et al., [1985, p.420-428, eng] 41-221
- Deployment and operation of the ice stations for the FRAM program. Heiberg, A., et al., [1985, p.429-432, eng] 41-222
- Acoustic array sensor tracking system. Von der Heydt, K., et al., [1985, p.464-471, eng] 41-229
- Systems and means of oceanic radio-communication. Panin, I.U.I., ed., [1984, 144p., rus] 41-557
- Satellites for collecting information from automatic hydrometeorological stations. Denisov, S.I., et al., [1984, p.85-88, rus] 41-559
- Physical oceanography near the North Pole. Pounder, E.R., [1986, p.11,763-11,777, eng] 41-1025
- Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., [1986, 224p., rus] 41-1748
- Surface winds and buoy drift, eastern Beaufort Sea coast. Kozo, T.L., et al., [1986, p.13,011-13,032, eng] 41-1860
- Logistics support for Arctic scientific camps and drifting ice stations. Hobson, G.D., [1986, p.462-472, eng] 41-2039
- PCSP's floating research station. [1987, p.6, eng] 41-2320
- First time above the North Pole. Stromilov, N.N., [1986, 134p., rus] 41-3014
- Ice Island underfoot. Chilingarov, A., et al., [1986, 175p., rus] 41-3250
- Analysis of NavSat buoy data from Beaufort Sea, 1980—primary results. [1981, 136p., eng] 41-3381

- Analysis of NavSat buoy data from Beaufort Sea, 1980—detailed results. [1981, 236p., eng] 41-3475
- Analysis of NavSat buoy data, Beaufort Sea, 1980, 271 fixes (part A). [1981, 173p., eng] 41-3476
- Analysis of NavSat buoy data, Beaufort Sea, 1980—271 fixes (part B). [1981, 173p., eng] 41-3477
- Analysis of NavSat buoy data, Beaufort Sea, 1980—measurement variances. [1981, 31p., eng] 41-3478
- Drill core analysis**
- Late Pleistocene sedimentation processes on the antarctic continental shelf. Grobe, H., [1986, 121p. + figs., ger] 41-267
- Recommendations for a U.S. ice coring program. [1986, 67p., eng] 41-1352
- Soviet glaciological studies on the eastern ice field in 1984-1985. [1986, p.10-16, rus] 41-1633
- Stratification in an ice core from Vestfonna, Nordaustlandet. Punning, I.A.-M.K., et al, [1986, p.39-43, eng] 41-1790
- Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core. De Angelis, M., et al, [1987, p.318-321, eng] 41-2505
- International antarctic glaciological program activities at South Pole Station and Vostok. Lorius, C., [1985, p.73-74, eng] 41-2633
- Pollen record from the Agassiz Ice Cap, northern Ellesmere Island, Canada. Bourgeois, J.C., [1986, p.345-354, eng] 41-3470
- Glaciological characteristics of an ice core in Patagonia. Yamada, T., [1987, p.59-67, eng] 41-3828
- Ice core study on Wisconsinan ice thickness on Ellesmere I., Canada. Koerner, R.M., et al, [1987, p.296-301, eng] 41-4079
- Be-10 concentrations in Greenland ice. Monaghan, M.C., [1987, p.197-203, eng] 41-4279
- Rheological properties of ice loaded with microparticles. Fisher, D.A., et al, [1986, p.501-510, eng] 41-4305
- Sulphuric acid in the antarctic ice sheet. Legrand, M., et al, [1987, p.671-676, eng] 41-4325
- See also: Ice cores
- Drilling**
- Blasting frozen ground in proximity of buildings and power plants. Toropov, V.V., [1986, p.42-44, rus] 41-512
- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Bratisev, A.P., ed, [1986, 119p., rus] 41-1167
- Reaction of tundra vegetation to petroleum pollution induced by drilling. Gnat, L.V., [1986, p.82-93, rus] 41-1171
- Disturbance of tundra vegetation by oil field development. Tentiukov, M.P., et al, [1986, p.94-103, rus] 41-1172
- Response of permafrost to disturbance. Lawson, D.E., [1986, p.1-7, eng] 41-1183
- Transportation systems for new developments of the Far North. Vasiluk, V.A., [1986, p.74-79, rus] 41-1204
- Mathematical models of well drilling processes in permafrost. Bugaev, V.G., [1978, p.69-73, rus] 41-1324
- Hydropneumatic hammers of EO-2621 excavators for frozen ground. Karnaukhov, A.V., et al, [1978, p.74-78, rus] 41-1325
- Hydrojet drilling technology for permafrost. Petrosian, L.R., et al, [1986, p.39-41, eng] 41-1849
- Using the UBM-20A assembly for drilling large-diameter wells in permafrost. Minakov, V.M., et al, [1986, p.24-27, rus] 41-2533
- Geocryological studies of the Pur-Nadym interfluvium, NW Siberia. Podbornyi, E.E., et al, [1986, p.95-100, rus] 41-2538
- Thermophysics of glaciers. Zotikov, I.A., [1986, 275p., eng] 41-2565
- Thickness and temperature of permafrost in Kular Range. Sheshin, I.U.B., et al, [1986, p.47-50, rus] 41-2818
- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968
- Forecasting ground temperature during adfreezing of piles. Pylaev, E.L., et al, [1987, p.73-75, rus] 41-3269
- Geologic indication of ground ice in Tien Shan and Pamir. Ermolin, E.D., [1986, p.22-29, rus] 41-3483
- Classifying frozen ground according to abrasion power. Leshchiner, V.B., et al, [1982, p.8-14, rus] 41-3545
- Borehole closure at Mizuho Station. Kawada, K., et al, [1986, p.66-73, eng] 41-3659
- Drilling and completion of water bearing layers in permafrost. Kvashnin, G.P., [1987, 247p. (Pertinent p.128-138), rus] 41-3666
- Drilling complex for the Far North. Safullin, M.N., et al, [1986, p.30-31, rus] 41-3773
- Experience in casing wells in permafrost layers. Medvedskii, R.I., et al, [1987, p.62-65, rus] 41-3774
- Low-temperature service facilities and recent status of their materials and welding. Saiga, Y., et al, [1986, p.1-21, eng] 41-3785
- Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124
- Man, sea, technology. Narusbaev, A.A., ed, [1987, 335p., rus] 41-4145
- Methodical and experimental bases of geothermy. Kropotkin, P.N., ed, [1983, 230p. (Pertinent p.79-84, 181-187), rus] 41-4614
- See also: Offshore drilling; Percussion drilling; Rotary drilling
- Drilling fluids**
- Drilling mud usage and discharge in the Arctic Ocean, 1978-1982. Evance, T.B., comp, [1985, 6p. + appendix, eng] 41-596
- Use and disposal of drilling fluids in the Arctic Ocean, 1983. Milburn, D., et al, [1986, 38p., eng] 41-597
- Use and disposal of drilling fluids in the Arctic Ocean, 1984. Milburn, D., et al, [1986, 47p., eng] 41-598
- Drilling fluids and cuttings discharges in Alaska. Houghton, J.P., et al, [1984, p.1-388, eng] 41-1782
- Using the UBM-20A assembly for drilling large-diameter wells in permafrost. Minakov, V.M., et al, [1986, p.24-27, rus] 41-2533
- Monitoring a sump containing drilling mud with a high salt content. Nenninger, R.D., [1987, 47p., eng] 41-3076
- Treatment and disposal of oil-based mud cuttings, Canadian Arctic. Drinnan, R.W., et al, [1987, 80p. + appendix, eng] 41-4532
- Drills**
- Self-lifting derrick towers for the Arctic. [1985, p.28-29, rus] 41-1515
- Cooperative construction of drilling assemblies. [1985, p.33, rus] 41-1516
- Drill bits for frozen fine-grained soils. Sellmann, P.V., et al, [1986, 33p., eng] 41-2610
- Dust control in coal quarries at subzero temperatures. Kupin, A.N., et al, [1985, p.153-154, rus] 41-2774
- Drilling complex BTSE-600 for rocks and frozen ground. Bryzhko, S.A., et al, [1986, p.41, rus] 41-2790
- Classifying frozen ground according to abrasion power. Leshchiner, V.B., et al, [1982, p.8-14, rus] 41-3545
- See also: Ice coring drills; Ice drills; Thermal drills
- Drops (liquids)**
- Scattering photometer for measuring single ice crystals and liquid droplets. Pluchino, A., [1987, p.614-620, eng] 41-3153
- See also: Cloud droplets; Raindrops
- Drying**
- Sludge dewatering at sewage treatment plants in Finland. Puolanne, J., [1981, p.107-117, eng] 41-392
- Freeze-thawing and dewatering plant for sewage sludges. Honda, T., et al, [1981, p.599-604, eng] 41-873
- Multivariate regression analysis of the process of frozen peat dehydration. Aleksandrov, B.M., [1986, p.15-19, rus] 41-3766
- See also: Freeze drying
- Dunes**
- Grass-shrub vegetation developing on Arctic sand dunes. Sergienko, V.G., [1987, p.208-215, rus] 41-3610
- Dust**
- Estimation of industrial emission into the atmosphere. Boiarina, A.P., et al, [1987, p.14-23, rus] 41-3945
- See also: Cosmic dust
- Dust control**
- Problems of engineering glaciology. Alekseev, V.R., ed, [1986, 223p., rus] 41-2145
- Using snow for dust control in northern mines. Osadoev, M.T., et al, [1986, p.193-196, rus] 41-2177
- Using artificial snow for dust control during mass-detonations in mines. Bitkolov, N.Z., et al, [1986, p.197-200, rus] 41-2178
- Theoretical and application problems concerning air exchange in deep quarries (Summaries of reports presented at the All-Union conference held in Apatity, Sep. 23-25, 1985). Vasserman, A.D., ed, [1985, 178p., rus] 41-2769
- Dust control on quarry roads at subzero temperatures. Loboda, A.I., et al, [1985, p.135-136, rus] 41-2771
- Using supermafrost ground water in normalizing the air in the Mir pipe quarry. Prudnikov, V.K., [1985, p.144-145, rus] 41-2772
- Dust control based on acoustics, centrifugal and foam-precipitation principles. Sergeev, V.S., [1985, p.152-153, rus] 41-2773
- Dust control in coal quarries at subzero temperatures. Kupin, A.N., et al, [1985, p.153-154, rus] 41-2774
- Regional landscape-geochemical investigations. Nechaeva, E.G., ed, [1986, 159p., rus] 41-4113
- Geochemical evaluation of the environmental impact of human activities. Davydova, N.D., [1986, p.135-143, rus] 41-4114
- Dynamic loads**
- Electrical impulse method of determining the strength of frozen ground and ice. Kytin, I.U.A., [1982, p.108-113, rus] 41-1275
- Impact strength of mudflow mass on transverse structures. Kukhaishvili, E.G., et al, [1985, p.356-360, rus] 41-1623
- Calculating pile foundations for hydraulic structures. Levachev, S.N., et al, [1986, 133p., rus] 41-1747
- Thermodynamics of a solid body subjected to external loads. Beghi, M., et al, [1987, p.26-32, eng] 41-2066
- Dynamic loads on floating ice plate from uniformly moving body. Gushchin, V.V., et al, [1985, p.385-387, rus] 41-2329
- Ice beam moving against a sloping structure. Sodhi, D.S., [1987, p.281-284, eng] 41-2433
- Friction on snow of ski soles, unwaxed and waxed. Shimbo, M., [1971, p.99-112, eng] 41-3907
- Dynamic properties**
- Machinery model propulsion tests in ice. Eskola, H., [1986, p.1001-1020, eng] 41-1143
- Ice-seawater turbulent boundary layer interaction with melting or freezing. Mellor, G.L., et al, [1986, p.1829-1846, eng] 41-2219
- Earth crust**
- The living Earth. Agriculture and natural resources. Ushakov, S.A., ed, [1986, 167p., rus] 41-1163
- Earth dams**
- Waterproofing and corrosion prevention in hydraulic structures. Shchavalev, N.F., ed, [1985, 100p., rus] 41-431
- Corrosion resistance of steel cores of earth dams. Kuznetsov, V.S., et al, [1985, p.63-68, rus] 41-434
- Aerodynamics of road embankments (a discussion). Ivanov, V.D., [1985, p.25-26, rus] 41-503
- Examples of dam construction in Siberia and the Far North. Kolmogorov, R.I., [1973, p.53-62, rus] 41-1276
- Power plant construction on permafrost. Shtelman, A.Sh., [1986, p.8-12, rus] 41-1400
- Field studies of the Neryungri earth dam. Belan, V.I., et al, [1986, p.18-20, rus] 41-1402
- Influence of cryogenic phenomena on the performance of monolithic concrete, filterless reinforcement of slopes of cohesive-earth dams. Kanarskil, V.F., et al, [1986, p.41-43, rus] 41-1403
- Experience in ice dam construction. Vdovin, I.U.I., et al, [1986, p.177-183, rus] 41-2174
- Project of the experimental Yamberg ice-core dam. Danielian, I.U.S., et al, [1986, p.183-189, rus] 41-2175
- Peat mining and preliminary construction work in winter. Khomich, V.A., [1986, p.15-17, rus] 41-2555
- Building thawed-earth dams in northern climatic zone. Shatagin, V.A., [1986, p.80-83, rus] 41-2754
- For northern construction sites. Malyshev, A.I.A., [1986, p.49-50, rus] 41-2792
- Temperature regime of artificial ice-bearing earth structures. Savilev, B.A., et al, [1986, p.166-168, rus] 41-2836
- Predicting settlement at a damsite on a tunnel valley deposit in Alberta. McClung, J.E., et al, [1987, p.45-57, eng] 41-2978
- Geomechanical studies of power supply structure foundations. Sapegin, D.D., ed, [1985, 120p., rus] 41-3126
- Changes in physical and mechanical properties of frozen ground used as construction material. Liapin, V.E., et al, [1986, p.30-34, rus] 41-3443
- Forecasting temperature and moisture regime of rock-earth fill dams. Bogoslovskii, P.A., et al, [1986, p.89-96, rus] 41-3451
- Experimental investigations of heat-mass transfer coefficients in macroporous media. Mukhetdinov, N.A., [1986, p.119-127, rus] 41-3455
- Using frozen ground in dam construction in permafrost areas. Kuznetsov, G.I., et al, [1986, p.128-141, rus] 41-3456
- Designing earth dams for permafrost regions. Anisimov, V.A., [1986, p.183-189, rus] 41-3461
- Thermal protection for the Waterloo Dam, northern Saskatchewan. Noonan, D.K.J., et al, [1982, p.437-449, eng] 41-3751
- Seasonally active ground cooling devices used in hydraulic construction. Buchko, N.A., [1983, p.29-40, rus] 41-4473
- Earth fills**
- Estimating the deformation of low-loaded structures in the BAM zone. Sobin, G.P., [1985, p.28-30, rus] 41-288
- Foundation construction in complex engineering-geological conditions in Finland. Kushnir, I.N., et al, [1985, p.42-43, rus] 41-295
- Radioactive isotope method of controlling earth density during roadbed construction. Kurochkin, V.V., [1986, p.11-12, rus] 41-437
- Aerodynamics of road embankments (a discussion). Ivanov, V.D., [1985, p.25-26, rus] 41-503
- Hydromechanization in construction of electric power plants. Shkundin, B.M., [1986, 224p. (pertinent p.156-174), rus] 41-619
- Stability of hydraulically built-up construction sites under dynamic loads. Efremov, N.A., et al, [1986, p.29-31, rus] 41-1529
- Design and construction of the socle part of the Kureyskaya channel dam. Makarov, V.A., et al, [1986, p.27-31, rus] 41-2866
- Geomechanical studies of power supply structure foundations. Sapegin, D.D., ed, [1985, 120p., rus] 41-3126
- Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant. Golli, O.R., [1985, p.52-56, rus] 41-3127
- Determining heat conductivity coefficients of coarse grained materials used in embankment construction. Gorokhov, E.N., [1985, p.105-110, rus] 41-3130
- Influence of temperature regime and ice content on deformation of embankments built of coarse-clastic soils. Gavrilov, A.N., [1986, p.44-53, rus] 41-3445
- Forecasting temperature and moisture regime of rock-earth fill dams. Bogoslovskii, P.A., et al, [1986, p.89-96, rus] 41-3451

## Earth fills (cont.)

- Experimental investigations of heat-mass transfer coefficients in macroporous media. Mukhetdinov, N.A., [1986, p.119-127, rus] 41-3455

Reinforced earth slab to reduce embankment loads, Auke Bay, Alaska. Elias, V., et al, [1981, 21p., eng] 41-4067

See also: Rock fills

## Earthquakes

Classifying northern areas according to fitness for mass construction. Nistratova, T.A., [1986, p.200-206, rus] 41-2101

Microearthquakes of the eastern Ross Ice Shelf. Blankenship, D.D., et al, [1987, p.30-34, eng] 41-4430

See also: Seismology

## Earthwork

Methods of estimating economic losses from water pollution by dredging. Matveev, A.A., [1985, p.63-66, rus] 41-210

Radioactive isotope method of controlling earth density during roadbed construction. Kurochkin, V.V., [1986, p.11-12, rus] 41-437

Foundations built of dry cemented earth mixtures. Kosenko, A.A., [1985, p.4-5, rus] 41-506

Hydromechanization in construction of electric power plants. Shkundin, B.M., [1986, 224p. (pertinent p.156-174), rus] 41-619

Winter highway construction. Bennett, F.L., [1986, p.32-40, eng] 41-642

Stresses in the hydraulic backfill. Knutsson, S., [1981, p.261-268, eng] 41-790

Determining economic effectiveness of technical equipment in the North. Dashkova, T.E., [1986, p.188-192, rus] 41-1207

Studies of frozen ground excavation equipment. Iarkin, A.A., ed, [1978, 87p., rus] 41-1310

Physico-mathematical model of caterpillar tractors equipped with scarifier attachments. Galtagori, M.M., et al, [1978, p.3-7, rus] 41-1311

Calculating metallic structures of excavation equipment. Selivanov, A.S., [1978, p.8-14, rus] 41-1312

Determining the parameters of ripper-tooth extensions. Sukhov, I.I., et al, [1978, p.14-20, rus] 41-1313

Calculating frozen ground resistance to excavation. Sholdo, G.A., et al, [1978, p.20-25, rus] 41-1314

Plotting a theoretical diagram of loads on cutting tools. Zakharov, V.A., [1978, p.25-30, rus] 41-1315

Determining loads on multi-blade milling tools. Zakharov, V.A., [1978, p.30-36, rus] 41-1316

Skidding of caterpillar rippers on frozen ground and hard rocks. Efimov, B.A., [1978, p.47-49, rus] 41-1319

Determining conditions for rational operation of rippers. Polonaki, G.L., [1978, p.49-52, rus] 41-1320

Studying the influence of cutting speed and cutting-tool parameters on frozen ground excavation. Sokolov, L.K., [1978, p.53-55, rus] 41-1321

Frozen ground excavation by trenching machines. Sokolov, L.K., [1978, p.57-63, rus] 41-1322

Stand for accelerated tests of bulldozer engine life. Mikheenko, V.V., [1978, p.78-82, rus] 41-1326

Design model of a percussion machine for soil compaction. Popov, G.N., et al, [1986, p.103-107, rus] 41-1394

Power plant construction on permafrost. Shtelman, A.Sh., [1986, p.8-12, rus] 41-1400

Stability of hydraulically built-up construction sites under dynamic loads. Efremov, N.A., et al, [1986, p.29-31, rus] 41-1529

Bulletin of scientific-technical information. Power engineering of Southern Yakutia. Petrov, N.A., ed, [1984, 32p., rus] 41-1829

Depth of sinking power-line support foundations. Argunov, L.I., [1984, p.11-13, rus] 41-1831

Thermal melioration of ground by late-fall loosening. Stafey, P.F., [1986, p.4-5, rus] 41-1886

Peat mining and preliminary construction work in winter. Khomich, V.A., [1986, p.15-17, rus] 41-2555

Chemical method of treating soils. Migliachenko, V.P., [1986, p.17-18, rus] 41-2556

Energy-saving techniques for winter works. Zhufko, P.I.A., [1986, p.18-20, rus] 41-2557

Inadequate norms concerning the increase of winter earthwork costs. Myznikov, I.U.N., [1987, p.41-44, rus] 41-2799

Organizing construction of the Kureyskaya hydroelectric power plant. Zait'sman, O.M., et al, [1986, p.17-23, rus] 41-2864

Earthwork organization for construction of Kureyskaya power plant dams. Balianikov, G.G., et al, [1986, p.45-49, rus] 41-2868

Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968

Manual for construction foremen working in the northern construction-climatic zone. Berezhovskii, B.I., et al, [1986, 328p., rus] 41-3664

Integrated mechanization of earthwork. Degtiarev, A.P., et al, [1987, 335p. (Pertinent p.284-318), rus] 41-3674

Artificial freezing of cohesive soils for preventing adhesion. Mochalov, V.I., et al, [1986, p.15-17, rus] 41-3768

Improving the performance of excavation equipment designed for the North. Primerov, S.N., et al, [1987, p.26-27, rus] 41-4122

Construction of heating networks in cold regions. Syachev, G.G., et al, [1986, p.421-422, eng] 41-4160

See also: Excavation

## East Africa

## —Mount Kenya

Ice flow velocity at Lewis Glacier, East Africa. Hastenrath, S., [1987, p.79-82, eng] 41-3600

## Echo sounding

Canadian Beaufort Sea 1984 repetitive mapping of ice scour. Shearer, J., et al, [1986, 43p. + appends. + maps, eng] 41-1566

Variability of Arctic sea ice drafts. Tucker, W.B., et al, [1986, p.237-256, eng] 41-2662

Ocean-bottom sea-ice scour: a computer-based data management system. Gilbert, G.R., et al, [1986, p.157-166, eng] 41-3106

Close range ice hazard detection: Phase 2. De Heering, P., et al, [1987, 67p. + appends. (2 vols.), eng] 41-3226

Digital radar system for echo studies on ice sheets. Schultz, D.G., et al, [1987, p.206-210, eng] 41-4459

## Ecology

Mathematical modelling. Processes in complex economic and ecological systems. Samarskii, A.A., ed, [1986, 295p., rus] 41-547

Modeling tundra populations and communities. Balbikov, E.V., et al, [1986, p.207-219, rus] 41-548

Phytogeographical relations of the cryptogamic flora of Bouvetöya. Engelakjón, T., et al, [1986, p.71-79, eng] 41-923

Outer Continental Shelf Environmental Assessment Program: Final reports of principal investigators, Vol.35. [1985, 440p., eng] 41-1784

Survival of the meadow vole in a snow cover. Kalliomäki, N.M., et al, [1984, p.153-164, eng] 41-1957

Ice cover effect on Odonata larvae in a pond. Beresford, D., [1984, p.165-181, eng] 41-1958

Ecological values along the North Slope portion of the Haul Road. Underwood, L.S., et al, [1978, 40p., eng] 41-2076

Antarctic ecosystem. Benninghoff, W.S., [1987, p.9-14, eng] 41-3739

Environmental impact of industrial undertakings. Krivolutski, D.A., ed, [1987, 320p., rus] 41-4567

Bioindications of natural environments in the North. Kriuchkov, V.V., [1987, p.50-57, rus] 41-4568

Under ice ecology pilot program, Great Lakes. Bolsenga, S.J., et al, [1986, 44p. + append., eng] 41-4581

See also: Ecosystems; Paleocology; Plant ecology

## Economic analysis

Classifying northern areas according to fitness for mass construction. Nistratova, T.A., [1986, p.200-206, rus] 41-2101

Forest-tundra and north taiga forests of the Far East. Raevskikh, V.M., et al, [1986, p.18-20, rus] 41-3744

See also: Cost analysis

## Economic development

Problems of developing natural resources in the northern Urals. Pakhomov, V.P., ed, [1985, 72p., rus] 41-203

Economic prerequisites for development in the northern Urals. Pakhomov, V.P., [1985, p.3-14, rus] 41-204

Some aspects of economic development of northern regions. Loginov, V.G., [1985, p.15-21, rus] 41-205

Construction of mineral-raw materials bases in northern mountains. Pakhomov, V.P., et al, [1985, p.39-45, rus] 41-208

USSR energy atlas. [1985, 79p., eng] 41-480

Age of the Arctic. Young, O.R., [1985, p.160-179, eng] 41-526

Alaska's mineral industry, 1985. Bundtzen, T.K., et al, [1986, 68p., eng] 41-569

Studying hydrographic indices of rivers in the Irtysh area. Trofimova, E.V., [1986, p.66-71, rus] 41-812

Development of power engineering in the Yakut ASSR related to the Baykal Amur Railroad construction. Collection of scientific papers. Petrov, N.A., ed, [1985, 101p., rus] 41-1925

Environmental protection of the North: a problem of national importance. Zabuzov, A.A., [1986, p.35-39, rus] 41-2560

Research and development in the Division of Mechanical Engineering, 1985. [1986, 89p., eng] 41-2575

Availability of mineral resources in the Antarctic. Roland, N.W., [1986, p.154-163, ger] 41-2921

Baykal-Amur line—a railroad discloses Siberia. Karger, A., [1985, p.38-48, ger] 41-3077

Scientific-technological progress and the development of northern natural resources. Chistobaev, A.I., et al, [1985, p.42-51, rus] 41-3435

Environmental protection in Siberia. Vorob'ev, V.V., [1985, p.52-60, rus] 41-3436

Transportation in regions of new economic development. Prokof'eva, T.A., et al, [1986, 208p., rus] 41-3663

Exploitation of antarctic minerals. Crockett, R.N., et al, [1987, p.121-132, eng] 41-3741

Reserved zones of Franz Josef Land. Uspenskii, S.M., et al, [1986, p.7-18, rus] 41-3861

All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] 41-3974

Regionalization of the permafrost zone for environmental protection purposes. Chizhov, A.V., et al, [1986, p.39, rus] 41-3975

Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.1. [1986, 166p., rus] 41-3982

Influence of natural environments on economic development of the North. Okishcheva, L.N., [1986, p.17-19, rus] 41-4062

Regional landscape-geochemical investigations. Nechaeva, E.G., ed, [1986, 159p., rus] 41-4113

See also: Landscape development; Natural resources

## Ecosystems

Grazing research at northern latitudes. [1986, 374p., eng] 41-216

Changes in vegetational cover induced by human factors. Nakhbatsava, S.F., et al, [1985, p.3-14, rus] 41-254

Fate of petroleum pollutants in Arctic ecosystems. Atlas, R.M., [1986, p.59-67, eng] 41-345

Acid neutralizing capacity of glacial sediments in western Ungava. Wilson, H., et al, [1986, p.69-85, eng] 41-346

Change of vegetation near the timber-line. Armand, A.D., [1985, p.59-62, eng] 41-373

Mathematical modelling. Processes in complex economic and ecological systems. Samarskii, A.A., ed, [1986, 295p., rus] 41-547

Modeling tundra populations and communities. Balbikov, E.V., et al, [1986, p.207-219, rus] 41-548

High altitude flora of northern Tien Shan. Baltenov, M.S., [1985, 231p., rus] 41-551

Restoration and vegetation succession in circumpolar lands. [1986, 25p., eng] 41-561

Arctic science conference, 1986. [1986, 55p., eng] 41-830

Snow physics, avalanches, mudflows. Bolov, V.R., ed, [1985, 108p., rus] 41-836

Seasonal variations in temperatures of subalpine soils. Razumov, V.V., [1985, p.90-102, rus] 41-848

Photosynthesis of steppe plants in eastern Hangay. Slemnev, N.N., [1986, p.460-473, rus] 41-990

Productivity of forest phytocenoses. Elagin, I.N., ed, [1984, 149p., rus] 41-1078

Influence of paludification and forest fires on forest development. Glebov, F.Z., et al, [1984, p.133-141, rus] 41-1083

Flora of the Kanin Peninsula. Sergienko, V.G., [1986, 147p., rus] 41-1084

Peculiarities of weathering and soil formation in forest tundra of the Northern Ob' Region. Liverovskaya, I.T., et al, [1986, p.58-63, rus] 41-1164

Southern tundras of Taymyr. Chernov, I.U.I., ed, [1986, 208p., rus] 41-1331

Vegetation of southern tundras in western Taymyr Peninsula. Matveeva, N.V., et al, [1986, p.5-67, rus] 41-1332

Hepatic mosses in southern tundra near Kresty village. Zhukova, A.L., [1986, p.80-88, rus] 41-1334

Leafy mosses of the Kresty village area. Kannukene, L.R., et al, [1986, p.89-100, rus] 41-1335

Vascular plant flora in the vicinity of Kresty village. Matveeva, N.V., et al, [1986, p.101-117, rus] 41-1336

Forms of vascular plants in the southern tundra subzone of Taymyr. Polozova, T.G., [1986, p.122-134, rus] 41-1337

Seasonal dynamics of plant communities in southern Taymyr tundras. Zankha, L.L., [1986, p.135-150, rus] 41-1338

Alpine phytocenotic systems of the Subarctic. Norin, B.N., ed, [1986, 292p., rus] 41-1344

Plant distribution in nival communities of the Chukotskiy Peninsula. Razzhivin, V.I.U., [1986, p.1088-1097, rus] 41-1456

Primary successions of Arctic tundras on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.99-105, rus] 41-1820

Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., [1986, p.49-67, rus] 41-1822

Introduced cold-resistant woody plants in Siberia. Vstovskaya, T.N., [1986, p.22-24, rus] 41-1833

Forest ecosystems in the Alaskan taiga. Van Cleave, K., ed, [1986, 230p., eng] 41-1898



- Introduction of aconites into the Subarctic. Gorelova, A.P., [1986, 116p., rus] 41-1927
- Energy-flow budgets in aquatic ecosystems. Petersen, G.H., [1984, p.621-633, eng] 41-2010
- Effect of crude oil on tidal-flat ecosystem in Port Valdez, Alaska. Naidu, A.S., et al, [1978, p.97-104, eng] 41-2121
- Bibliography and analytical data on North Slope. [1979, 60p., eng] 41-2193
- Impacts of increasing CO<sub>2</sub> on natural vegetation, particularly the tundra. Oechel, W.C., et al, [1986, p.36-47, eng] 41-2217
- Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al, [1986, p.72-80, rus] 41-2250
- Development of taiga forests. Savina, L.N., [1986, 189p., rus] 41-2258
- Impact of oilfield development on shorebirds, Prudhoe Bay, Alaska. Mehan, R.H., [1986, 92p., eng] 41-2287
- Primary succession in Arctic tundra on the west coast of Spitzbergen (Svalbard). Tishkov, A.A., [1986, p.148-156, eng] 41-2341
- Kologriv forest (ecological investigations). Sokolov, V.E., ed, [1986, 126p., rus] 41-2345
- Structure of the radiation and heat balance in Kologriv forest. Rudnev, N.I., [1986, p.72-87, rus] 41-2348
- Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae-Leguminosae. Part 2. Family Leguminosae. Korobkov, A.A., et al, [1986, 188p., rus] 41-2361
- Preliminary results of studying mosses in the "Stolby" and Sayan-Shushenskoye preservation parks. Vasil'ev, A.N., [1986, p.70-72, rus] 41-2457
- Artificial coenosis as a plant protection method. Lubiagina, N.P., [1986, p.88-90, rus] 41-2459
- Liverwort mosses of the Matuiyakh river (Yamal Peninsula). Zhukova, A.L., et al, [1986, p.642-649, rus] 41-2561
- Floristic findings in Penkigney Bay, Chukotskiy Peninsula. Sekretareva, N.A., [1986, p.677-683, rus] 41-2563
- Studies of horizontal composition of marginal vegetation in the Salair taiga. Kirikova, L.A., et al, [1986, p.22-28, rus] 41-2600
- Lichens in western Chukot highlands (Paliavaam River). Makarova, I.I., [1986, p.105-108, rus] 41-2778
- Lichens in fir-spruce forests of Sikhote Alin Mountains. Skirina, I.F., et al, [1986, p.111-112, rus] 41-2779
- Interrelationships among components of biogeocoenoses in southern taiga. Smirnov, A.V., ed, [1986, 120p., rus] 41-2898
- Role of fires in taiga paludification. Liakhova, I.G., [1986, p.75-80, rus] 41-2899
- Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al, [1986, 112p., rus] 41-2902
- Nitrogen of a moss ecosystem on glacial outwash sands, New Hampshire. Bowden, R.D., [1987, 149p., eng] 41-3346
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] 41-3433
- Rational use and preservation of ecosystems in the North. Pivachenko, N.I., [1985, p.68-75, rus] 41-3437
- Grass-shrub vegetation developing on Arctic sand dunes. Sergienko, V.G., [1987, p.208-215, rus] 41-3610
- Vegetation of Mabel and Guker islands (Franz Josef Land archipelago). Saifonova, I.N., [1986, p.51-63, rus] 41-3866
- See also: Ecology; Forest ecosystems; Plant ecology
- Ecuador**
- Chimborazo
- Late Quaternary moraines in the Chimborazo area. Ecuador. Clapperton, C.M., et al, [1985, p.135-142, eng] 41-1225
- Edoma complex**
- Pleistocene glaciations in East Asia. Bessalyt, V.G., ed, [1984, 212p., rus] 41-1910
- Glacier ice in Quaternary deposits of the Malyk-Siyenskaya basin. Bessalyt, V.G., et al, [1984, p.107-116, rus] 41-1911
- Peculiarities of studying the Pleistocene Edoma series of the northeastern USSR. Tomirdiario, S.V., et al, [1984, p.159-173, rus] 41-1912
- Origin of Edoma deposits. Zhestkova, T.N., et al, [1986, p.108-113, rus] 41-2090
- Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka). Kotov, A.N., et al, [1986, p.114-120, rus] 41-2091
- Topographic analysis of the lower Kolyma River for cryolithologic mapping. Kaplina, T.N., et al, [1986, p.51-60, rus] 41-2819
- Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] 41-3771
- Elastic properties**
- Behavior of graphite/polyimide composites at extreme temperatures. Garber, D.P., et al, [1982, p.73-91, eng] 41-1989
- See also: Ice elasticity; Viscoelasticity
- Elastic waves**
- Methods of measuring elastic wave parameters in snow samples. Bagov, M.M., [1985, p.7-14, rus] 41-838
- Steady-state ice-structure interaction analysis. Williams, A.N., et al, [1986, p.989-1006, eng] 41-2069
- Experimental study of plastic wave velocity in snow. Sato, A., [1987, p.183-196, jpn] 41-4007
- Electric charge**
- Collection efficiency of charged snow crystals. Murakami, M., et al, [1985, p.1127-1137, eng] 41-2569
- Electric equipment**
- Operation of outdoor distribution systems in Chita City under frost heave conditions. Zhelezniak, I.I., et al, [1985, p.26-28, rus] 41-287
- Snow thrower with dual controls. Krug, C.C., [1983, 4 col., eng] 41-1774
- Automation and powering of loading-unloading equipment. Sobkalov, I.P., et al, [1986, 128p., rus] 41-2227
- Construction of heating networks in cold regions. Sypachev, G.G., et al, [1986, p.421-422, eng] 41-4160
- Electric fields**
- Nucleation mechanism of ice crystals under electrical effect. Shichiri, T., et al, [1986, p.502-508, eng] 41-2105
- Influence of electric fields on freezing of supercooled water drops. Shlykov, V.V., [1986, p.32-40, rus] 41-3464
- Electric heating**
- Countermeasures against damage by heavy snowfall in Seikan Ship Bureau. Sakakibara, H., [1985, p.13-15, jpn] 41-178
- Countermeasures against damage by heavy snowfall in Yonago District. Takahashi, T., [1985, p.17-18, jpn] 41-180
- Countermeasures against damage by heavy snowfall in Kinki Nippon railways. Fukuda, K., [1985, p.19-20, jpn] 41-181
- Snow and ice removal from railroad switches in Europe. Takakuwa, Y., [1985, p.21-25, jpn] 41-182
- Countermeasures for ice and snow accumulation on transmission lines. Asai, S., [1985, p.26-27, jpn] 41-183
- Lightweight heater tape for shuttle propellant tank. Spencer, D.J., et al, [1986, 51p., eng] 41-2070
- High-voltage network for areas of increased intensity of icing. Genrikh, G.A., et al, [1976, 38 col. + 22 sheets, eng] 41-2497
- Calculating harmonic component levels when heating iced power lines. Zhezhelenko, I.V., et al, [1986, p.16-21, rus] 41-2546
- New sampling technique for northern placer mines. Riabets, N.I., et al, [1986, p.10-15, rus] 41-4549
- Electric power**
- Hydromechanization in construction of electric power plants. Shkundin, B.M., [1986, 224p. (pertinent p.156-174), rus] 41-619
- Mobile-crew and modular construction methods in permafrost areas. Petrov, I.M., et al, [1986, p.49-51, rus] 41-882
- Substations 110 kv with the equipment housed in superblock structures. Ezrakhovich, L.O., [1986, p.3-6, rus] 41-909
- Substations 110/6-10 kv built in the Urengoy gas field area. Gaft, S.I.A., et al, [1986, p.6-7, rus] 41-910
- Distributing device 110 kv with mobile reel-carriage switches. Karpov, V.V., et al, [1986, p.9-10, rus] 41-912
- Electrical groundings in permafrost areas. Fel'dman, M.L., [1986, p.11-12, rus] 41-913
- Influence of geocryological conditions of the construction site on the design of the Vilyuy Hydroelectric Power Plant No.3. Ziskovich, V.Kh., et al, [1986, p.53-55, rus] 41-987
- Basic problems of power supply in the North. Ryl'ski, V.A., et al, [1986, p.86-93, rus] 41-1205
- Mobile power plants used in northern and remote regions. Taits, V.G., [1986, p.31-34, rus] 41-1536
- Benthos in the experimental bays of the Ob' River below Novosibirsk. Blagovidova, L.A., et al, [1985, p.66-72, rus] 41-1832
- Primary production in the Bratsk reservoir. Part 2. Assimilation of carbon by phytoplankton. Pautova, V.N., et al, [1986, p.50-58, rus] 41-1834
- Development of power engineering in the Yakut ASSR related to the Baykal Amur Railroad construction. Collection of scientific papers. Petrov, N.A., ed, [1985, 101p., rus] 41-1925
- Safety measures for electric power objects of the South Yakutia Task Economic Complex. Sedalishchev, V.A., et al, [1985, p.91-99, rus] 41-1926
- Development of low power data logger for unmanned antarctic sites. Katsuta, Y., et al, [1986, p.175-188, jpn] 41-2694
- Basic structures of the Kureyskaya hydroelectric plant. Makurov, V.A., et al, [1986, p.11-17, rus] 41-2863
- Passing of ice and construction wastes at the Kureyskaya site. Zaltsman, O.M., et al, [1986, p.23-27, rus] 41-2865
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Geomechanical studies of power supply structure foundations. Saepgin, D.D., ed, [1985, 120p., rus] 41-3126
- Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant. Golli, O.R., [1985, p.52-56, rus] 41-3127
- Engineering geocryology in hydraulic construction. Bikanov, G.F., ed, [1986, 205p., rus] 41-3439
- Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000. Kudoiarov, L.I., [1986, p.13-23, rus] 41-3441
- Problems of engineering geocryology in hydraulic construction. Taytovich, N.A., et al, [1986, p.23-29, rus] 41-3442
- Temperature and moisture regime of the Vilyuy power plant dam. Olovinn, B.A., [1986, p.151-161, rus] 41-3458
- Tidal power plants. Bernshteyn, L.B., et al, [1987, 296p. (Pertinent p.239-273), rus] 41-3675
- Engineering preparations for construction of the Surgut Power Plant. Lutsiuk, I.V., et al, [1987, p.14-17, rus] 41-3808
- Ice and hydropower. Thomsen, H.H., [1986, 73p., dan] 41-3960
- Man, sea, technology. Narusbaev, A.A., ed, [1987, 335p., rus] 41-4145
- Oceanic thermal power plants. Il'in, A.K., [1987, p.96-112, rus] 41-4146
- Construction of heating networks in cold regions. Sypachev, G.G., et al, [1986, p.421-422, eng] 41-4160
- Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed, [1983, 123p., rus] 41-4470
- Using thermopiles in network construction. Smirnov, V.N., [1983, p.108-118, rus] 41-4431
- See also: Nuclear power
- Electrical conductivity**
- See: Electrical resistivity
- Electrical grounding**
- Electrical groundings in permafrost areas. Fel'dman, M.L., [1986, p.11-12, rus] 41-913
- Development of power engineering in the Yakut ASSR related to the Baykal Amur Railroad construction. Collection of scientific papers. Petrov, N.A., ed, [1985, 101p., rus] 41-1925
- Safety measures for electric-power objects of the South Yakutia Task Economic Complex. Sedalishchev, V.A., et al, [1985, p.91-99, rus] 41-1926
- Construction of electric power lines for main pipelines. Manual. Arnopolin, A.G., et al, [1986, 164p. (Pertinent p.127-138), rus] 41-2890
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Electrical insulation**
- On the role of water film in the mechanism of flashover of ice insulators. Sugawara, N., et al, [1986, p.281-284, eng] 41-3416
- Electrical measurement**
- Vertical electrical soundings in the vicinity of extended taliks. Boikov, S.A., et al, [1986, p.172-180, rus] 41-2098
- Electrical properties**
- Winter cumulus electrification in an axisymmetric cloud model. Takahashi, T., [1982, p.554-557, eng] 41-466
- Picovoltmeters used in low-temperature research. Krasnopolin, I.A., [1986, p.1427-1431, eng] 41-994
- Natural electrical potentials that arise when soils freeze. Yarkin, I.G., [1986, 24p., eng] 41-3929
- See also: Dielectric properties; Ice electrical properties; Snow electrical properties
- Electrical resistivity**
- Realization of the ice point. Georgiuss, R.S., [1986, p.573-575, eng] 41-3304
- Snow-cover electrical resistivity and solid precipitation in Sapporo. Mizuno, Y., [1986, p.11-15, jpn] 41-3502
- Electromagnetic properties**
- Ocean wave phenomena observed with an adaptive multifrequency radar system. Gjessing, D.T., et al, [1986, p.311-327, eng] 41-1813
- Electromagnetic properties of sea ice. Kovacs, A., et al, [1986, p.57-133, eng] 41-2655
- Electromagnetic property trends in sea ice, Part 1. Kovacs, A., et al, [1987, 45p., eng] 41-4368
- Electromagnetic prospecting**
- High-resolution electromagnetic altimetry over the ocean. Won, I.J., [1986, p.327-332, eng] 41-1511
- Vertical electrical soundings in the vicinity of extended taliks. Boikov, S.A., et al, [1986, p.172-180, rus] 41-2098
- Determination of the thickness of the frozen zone in soils. Baker, T.H.W., et al, [1982, 8p., eng] 41-3228
- Possibility of using the transient processes sounding method in geocryological mapping. Nim, I.U.A., et al, [1986, p.144-153, rus] 41-3495
- Ice thickness and structure of the Vernagferner, Austrian Alps. Blindow, N., et al, [1986, p.43-60, eng] 41-3525
- Electron microscopy**
- Microparticles in Dome C ice cores. Gaudichet, A., et al, [1986, p.250-261, eng] 41-1755
- See also: Scanning electron microscopy

**Electronic equipment**

- Meteorological and snow cover measurements at Grayling, Michigan. Bates, R.E., et al, [1985, p.212-229, eng] 41-1497

- Digital radar system for echo studies on ice sheets. Schultz, D.G., et al, [1987, p.206-210, eng] 41-4459

**Elevation**

See: Altitude

**Embankments**

- Formula for calculating horizontal forces produced by thawing ground. Bondarenko, G.I., [1985, p.53-55, rus] 41-302

- Plastic foam—from frost protection to road embankments. Refsdal, G., [1985, p.16-19, eng] 41-335

- Aerodynamics of road embankments (a discussion). Ivanov, V.D., [1985, p.25-26, rus] 41-503

- Embankments built of water-logged earth with horizontal sand-drains. Vasil'ev, I.U.M., [1985, p.2-3, rus] 41-505

- Formation of ice-marginal embankments into ice-dammed lakes, Pleistocene. Booth, D.B., [1986, p.247-263, eng] 41-563

- Strength and filtration properties of water-saturated peats in a detonation zone. Smirnov, A.G., et al, [1986, p.115-118, rus] 41-906

- Interaction between submerged embankment and multi-year ice floes. Larsen, O.D., [1986, p.678-692, eng] 41-1124

- Design of tall railroad embankments on weak bases. Vol'nov, M.V., et al, [1986, p.5-6, rus] 41-1530

- State of corrugated metal culverts during operation. Roiaik, G.S., et al, [1986, p.12-13, rus] 41-1531

- Thermophysical properties of ground containing coarse clastic inclusions. Gavril'ev, R.I., [1986, p.60-71, rus] 41-1538

- Calculating the amount of solar radiation heat reaching mine roads. Bazavuk, V.A., [1986, p.192-200, rus] 41-2100

- Freezing front location in two-dimensional cold soils. Hromadka, T.V., II, et al, [1987, p.91-95, eng] 41-2407

- Designing routes for complicated geological and climatic conditions in plains. Skutin, A.I., [1984, p.66-74, rus] 41-2455

- Peat mining and preliminary construction work in winter. Khomich, V.A., [1986, p.15-17, rus] 41-2555

- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013

- Evaluation of road construction by surcharge over muskeg. Johnson, E.G., [1982, 13p. + append., eng] 41-3048

- Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant. Golli, O.R., [1985, p.52-56, rus] 41-3127

- Determining heat conductivity coefficients of coarse grained materials used in embankment construction. Gorokhov, E.N., [1985, p.105-110, rus] 41-3130

- Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR. Adushinov, A.A., [1986, p.52-59, rus] 41-3331

- Influence of temperature regime and ice content on deformation of embankments built of coarse-clastic soils. Gavrilov, A.N., [1986, p.44-53, rus] 41-3445

- Cryogenic processes and the stability of tailing-dumps built on permafrost bases. Kuznetsov, G.I., [1986, p.67-75, rus] 41-3448

- Reinforced earth slab to reduce embankment loads, Auke Bay, Alaska. Elias, V., et al, [1981, 21p., eng] 41-4067

- Application of geotextiles in Alaska. Johnson, E.G., [1983, 64p., eng] 41-4071

- Interaction of gravel, surface drainage and culverts with permafrost. Brown, J., et al, [1984, 35p., eng] 41-4072

**Engine starters**

- Cold starting ability of in-service M113 vehicles. Stupich, T.F., et al, [1986, 17p. + appends., eng] 41-3010

- Starting an arterial heat pipe from frozen state. Abramenko, A.N., et al, [1987, p.1283-1288, eng] 41-4161

**Engineering**

- Natural hazards and research needs in coastal and ocean engineering. Nath, J.H., ed, [1984, 62p., eng] 41-83

- Ocean engineering and the environment—Oceans '85 Conference, Vol. I, [1985, 2 vols. (1364p.), eng] 41-217

- River and lake ice engineering. Ashton, G.D., ed, [1986, 485p., eng] 41-231

- OMAE symposium on offshore and Arctic frontiers, 1st, 1986, [1986, 492p., eng] 41-354

- Institute of Northern Engineering, 1985-1986 report, [1986, 48p., eng] 41-364

- Ice engineering laboratory, Nippon Kohan K.K. [1986, p.113-115, jpn] 41-444

- Permafrost. Benson, C., et al, [1986, p.99-106, eng] 41-476

- Ice and river engineering. Starosolszky, O., [1985, p.175-219, eng] 41-902

- Research on engineering in arctic and subarctic regions, the Cold Region Technology Center of Luleå University. Lindmark, R., [1986, p.125-129, eng] 41-970

- Northern Workshop, 1st, 1984; proceedings and abstracts. [1986, 74p., eng] 41-1034

- Ice engineering research activities on the Japanese coast of Okhotsk Sea. Oshima, M., [1986, p.15-29, eng] 41-1088

- Fire protection of Arctic offshore structures. Merrick, P.E.D., [1986, p.223-237, eng] 41-2276

- Fire protection engineering in modular Arctic facilities. Merrick, P.E.D., [1986, p.238-250, eng] 41-2277

- Petroleum engineering impact on northern swamps. Polkoshnikov, O.V., et al, [1982, p.198-209, eng] 41-2344

- Research and development in the Division of Mechanical Engineering, 1985, [1986, 89p., eng] 41-2575

- Slope stability: geotechnical engineering and geomorphology. Anderson, M.G., ed, [1987, 648p., eng] 41-3042

- Engineering applications and risk assessment: summary and discussion. Allan, D., et al, [1986, p.31-37, eng] 41-3089

- Subzero engineering. Hills, A., [1986, p.52-56, eng] 41-4273

- See also: Avalanche engineering; Human factors engineering; Military engineering; Municipal engineering

**Engineering geology**

- Experience in compiling and using complex engineering geological maps. Osokin, N.I., et al, [1986, p.213-219, rus] 41-137

- Loess deposits of the USSR. Sergeev, E.M., ed, [1986, 2 volumes (only Vol.2 pertinent), rus] 41-620

- Engineering and geological investigations of saline soils. Bakenov, B.B., et al, [1986, 245p., rus] 41-996

- Determining the scope of engineering-geological research in permafrost regions. Khristalev, L.N., [1986, p.27-38, rus] 41-2083

- Geocryological mapping for regional surveying and design research. Garagulia, L.S., et al, [1986, p.38-45, rus] 41-2084

- Conditions of upbuilding and properties of artificial sea-water ice. Gagarin, V.E., et al, [1986, p.140-146, rus] 41-2167

- Organic soils. Rubinshteyn, A.I.A., [1986, 89p., rus] 41-2729

- Variabilities in engineering-geological conditions in NW Siberia. Goral'chuk, M.I., et al, [1986, p.41-46, rus] 41-2817

- Engineering-geological properties of Quaternary deposits in central Yakutia. Drorzdov, D.S., et al, [1986, p.66-74, rus] 41-2821

- Regional regularities governing long-range freeze-thaw of ground. Kuznetsova, I.L., et al, [1986, p.176-183, rus] 41-2838

- Changes in engineering-geocryological conditions induced by economic development. Nevecheria, V.L., et al, [1986, p.184-191, rus] 41-2839

- Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, [1987, 144p., rus] 41-2983

- Engineering geology of the Government Hill area, Anchorage, Alaska. Updike, R.G., et al, [1986, 32p., eng] 41-3224

- Prospects and problems of hydraulic power construction in the North. Bilanov, G.F., et al, [1986, p.5-12, rus] 41-3440

- Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000. Kudoiarov, L.I., [1986, p.13-23, rus] 41-3441

- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481

- Compilation of a regional geocryological forecast based on small-scale maps of natural complexes in the cryolithozone of western Siberia. Kritsuk, L.N., et al, [1986, p.53-67, rus] 41-3486

- Possibilities of landscape indication in engineering-geological surveys of southern Central Yakutia. Gravis, G.F., et al, [1986, p.85-96, rus] 41-3489

- Southern boundary of permafrost distribution within the West Siberian Plain. Trofimov, V.T., et al, [1986, p.106-113, rus] 41-3776

- Possibilities of the landscape-indication method for engineering-geological studies of northern West Siberia. Bondarik, G.K., et al, [1987, p.15-29, rus] 41-4621

**Engines**

- Vehicular transport at McMurdo. Dibbern, J.S., [1986, 31p., eng] 41-638

- Engines and installations for arctic supply vessels. [1983, p.62-63, eng] 41-789

- Marine gas turbine inlet de-icing. Reinauer, G.A., [1986, p.457-461, eng] 41-949

- Ice pumps and their rates. Lewis, E.L., et al, [1986, p.11,756-11,762, eng] 41-1024

- Problems of technical tribology in Arctic service conditions. Cherskii, I.N., et al, [1986, p.779-792, eng] 41-1132

- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed, [1986, 120p., rus] 41-3385

- Starting an arterial heat pipe from frozen state. Abramenko, A.N., et al, [1987, p.1283-1288, eng] 41-4161

- See also: Diesel engines; Jet engines

**Entrainment**

See: Air entrainment

**Environment simulation**

- Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al, [1986, 63p., rus] 41-2362

- Numerical simulation of orographic snowfall. Cotton, W.R., et al, [1986, p.1658-1680, eng] 41-2500

- Point probability distributions of frozen soil. Zuzel, J.F., et al, [1986, p.1681-1686, eng] 41-2501

**Environmental impact**

- Effects of road de-icing salt on stream invertebrates. Kersey, K., [1981, 21p., eng] 41-240

- Oil spill impacts on meadow soils. Odeusova, T.G., [1985, p.27-31, rus] 41-256

- Bibliography on the fate and effects of arctic marine oil pollution. Young, S.C., ed, [1986, 212p., eng] 41-270

- Designing for automotive corrosion prevention. [1978, 132p., eng] 41-377

- Development and use of a new melting agent. Washitani, J., [1985, p.49-57, ger] 41-390

- Seventh continent; Antarctica in a resource age. Shapley, D., [1985, 315p., eng] 41-649

- Heliogeophysics and the control of natural environments. Danilova, A.D., ed, [1986, 192p., rus] 41-652

- Separating the background component of snow pollution near industrial sources. Kerbi, S.B., et al, [1986, p.119-123, rus] 41-653

- Response of permafrost to disturbance. Lawson, D.E., [1986, p.1-7, eng] 41-1183

- Influence of anthropogenic disturbances on the temperature field of permafrost. Parmuzin, S.I.U., [1986, p.206-212, rus] 41-2102

- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskii, M.I.A., et al, [1986, 133p., rus] 41-2253

- Impact of oilfield development on shorebirds, Prudhoe Bay, Alaska. Meehan, R.H., [1986, 92p., eng] 41-2287

- Ecological effects of canal diversion on Hudson and James Bays. Milko, R., [1986, p.316-326, eng] 41-2690

- Organization of construction under special environmental and climatic conditions. Construction manual. Shakhparonov, V.V., et al, [1986, 255p., rus] 41-2862

- Environmental impact analysis process (Pt.2). Brown, V.G., [1987, Var.p., eng] 41-3009

- Natural revegetation of subpolar mountain areas affected by industry. Martynenko, V.A., [1986, p.1663-1668, rus] 41-3026

- Environmental assessment of the Alaskan continental shelf, Vol.3: effects and contaminant baselines. [1980, 352p., eng] 41-3380

- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] 41-3433

- Rational use and preservation of ecosystems in the North. Pavchenko, N.I., [1985, p.68-75, rus] 41-3437

- Changes in ecosystems of the North due to economic development. Kriuchkov, V.V., [1985, p.76-83, rus] 41-3438

- Science and public policy: program and abstracts of the conference. [1984, 251p., eng] 41-3615

- Tidal power plants. Bernshteyn, L.B., et al, [1987, 296p., (Pertinent p.239-273), rus] 41-3675

- Antarctic terrestrial ecosystem. Walton, D.W.H., [1987, p.83-93, eng] 41-3740

- All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] 41-3974

- Regionalization of the permafrost zone for environmental protection purposes. Chizhov, A.V., et al, [1986, p.39, rus] 41-3975

- Air cushion vehicle operations in the Arctic. Fancy, S.G., [1982, 27p., eng] 41-4068

- Regional landscape-geochemical investigations. Nechaeva, E.G., ed, [1986, 159p., rus] 41-4113

- Use of map parameters to examine cumulative impacts in Prudhoe Bay Oilfield. Walker, D.A., et al, [1986, p.149-160, eng] 41-4139

- Environmental impact of industrial undertakings. Krivolutski, D.A., ed, [1987, 320p., rus] 41-4567

**Environmental protection**

- Hydromechanization in construction of electric power plants. Shkundin, B.M., [1986, 224p. (pertinent p.156-174), rus] 41-619

- Loess deposits of the USSR. Sergeev, E.M., ed, [1986, 2 volumes (only Vol.2 pertinent), rus] 41-620

- Bibliography of alpine and subalpine areas of the Front Range, Colorado. Halfpenny, J.C., comp, [1986, 114p., eng] 41-697

- Pollution protection of water resources in the Timan-Pechora Task Economic Complex. Bratshev, A.A., [1986, p.68-73, rus] 41-1170

- Flowtons—transportation systems for difficult "off-road" terrain. Davis, R.M., et al, [1986, p.679-692, eng] 41-2051

- Influence of anthropogenic disturbances on the temperature field of permafrost. Parmuzin, S.I.U., [1986, p.206-212, rus] 41-2102

- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). [1986, 126p., rus] 41-2213

- Lichen pine forests. Listov, A.A., 1986, 181p., rus  
41-2288
- Ecologic problems of protecting living organisms in northern seas. Matishov, G.G., et al, 1986, p.13-16, rus  
41-2387
- All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks, Novosibirsk, Aug. 26-28, 1986. Summaries, 1986, 165p., rus  
41-2456
- Botanical studies in Siberian preservation parks. Koropachinskii, I.I.U., et al, 1986, p.85-88, rus  
41-2458
- Artificial coenosis as a plant protection method. Lubiagina, N.P., 1986, p.88-90, rus  
41-2459
- Preservation of high-altitude vegetation in the Altai-Sayan Mountains. Sedelnikov, V.P., 1986, p.106-108, rus  
41-2461
- Inventorying building materials. Merry, C.J., 1986, 25p., eng  
41-2530
- Environmental protection of the North: a problem of national importance. Zabuzov, A.A., 1986, p.35-39, rus  
41-2560
- Impact of ejecta from coal-fueled power plants on paludal north-taiga pine forests. Alekseev, V.A., et al, 1986, p.664-672, rus  
41-2562
- Management of Arctic marine transportation: a Canadian perspective. McRae, D.M., 1986, p.350-359, eng  
41-2691
- Ocean development and management in the Arctic by USA and Canada. Vanderzwaag, D.L., et al, 1986, p.327-337, eng  
41-2724
- Jurisdiction and management of Arctic marine transportation. Westermeyer, W.E., et al, 1986, p.338-349, eng  
41-2725
- Atlas of the polar regions. 1985, 66p., eng  
41-2884
- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed, 1986, 81p., rus  
41-2916
- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, 1986, p.36-41, rus  
41-2918
- Arctic National Wildlife Refuge, Alaska. 1987, 208p., maps, eng  
41-3362
- Environmental protection in Siberia. Vorob'ev, V.V., 1985, p.52-60, rus  
41-3436
- Description of the building materials data base for Cincinnati, Ohio. Merry, C.J., et al, 1986, 85p., eng  
41-3498
- Antarctic terrestrial ecosystem. Walton, D.W.H., 1987, p.83-93, eng  
41-3740
- Exploitation of antarctic minerals. Crockett, R.N., et al, 1987, p.121-132, eng  
41-3741
- Natural associations of the Arctic and their protection. Korotkevich, E.S., ed, 1986, 120p., rus  
41-3860
- Reserved zones of Franz Josef Land. Uspenskii, S.M., et al, 1986, p.7-18, rus  
41-3861
- Protected territories of the North. Uspenskii, S.M., et al, 1986, p.18-24, rus  
41-3862
- Human factors in the development of basic Arctic geosystems. Govorukha, L.S., 1986, p.24-30, rus  
41-3863
- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.1, 1986, 166p., rus  
41-3982
- Bioindications of natural environments in the North. Kruchkov, V.V., 1987, p.60-67, rus  
41-4568
- Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed, 1986, 135p., rus  
41-4572
- Prospects and possible consequences of hydraulic meliorations in western Siberia. Malik, L.K., 1986, p.77-89, rus  
41-4573
- Environmental tests**
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, 1985, 113p., rus  
41-3433
- Environments**
- Catalog of microfiche of Alaska natural resources and environment. 1986, 167p., eng  
41-965
- NANA region environment, a summary of available information. Hale, L.Z., 1979, 14p., + plates, eng  
41-1781
- Russian-English Arctic environment glossary. 1985, 150p., rus  
41-1897
- Modeling of processes in landscape-geochemical systems. Syuev, V.V., 1986, 301p., rus  
41-3512
- Eolian soils**
- Eolian processes in glaciers, SW Spitsbergen. Kida, J., 1986, p.25-43, eng  
41-1550
- Microparticles in Dome C ice cores. Gaudichet, A., et al, 1986, p.250-261, eng  
41-1755
- Eolian dunes in Victoria Land. Miotke, F.-D., 1985, p.79-125, ger  
41-3252
- Equipment**
- Polar technology—ice engineering. 1986, c10p., eng  
41-268
- Snow melter. Muhammad, C.C., 1983, 8 col., eng  
41-479
- Hydrologic instrumentation facilities. Wagner, C.R., 1986, p.209-218, eng  
41-538
- Vehicular transport at McMurdo. Dibbern, J.S., 1986, 31p., eng  
41-638
- Engineering program on anti-de-icing of the RAST track. Boston, D.A., 1986, p.201-214, eng  
41-933
- Freeze protection of ships and shipborne equipment. Roberts, J., et al, 1986, p.500-542, eng  
41-954
- Self-lifting derrick towers for the Arctic. 1985, p.28-29, rus  
41-1515
- Ice scraper. Brace, A.W., et al, 1983, 4 col., eng  
41-1671
- Curved glass ice-scraper. Porchet, M., 1983, 2 col., eng  
41-1672
- Ice disaggregation system. Morgan, G.W., 1982, 8 col., eng  
41-1676
- Means for increasing the efficiency of an ice disaggregation system. Morgan, G.W., 1983, 8 col., eng  
41-1677
- Expansion joint snowplow deflector. Puccio, G.S., 1983, 4 col., eng  
41-1772
- Developing machines and equipment for winter road maintenance. Tampon, T., 1983, p.268-269, fin  
41-1935
- Drilling rig transportation in the Canadian arctic islands. Baudais, D.J., et al, 1986, p.420-451, eng  
41-2038
- Evaluating production efficiency of pneumohydraulic sprayers of snow-producing equipment. Ivanov, I.I., 1986, p.72-77, rus  
41-2156
- Testing the experimental assembly for manufacturing artificial snow on dredge proving-grounds. Petrenko, N.R., 1986, p.78-80, rus  
41-2157
- Units and vehicles for spreading de-icing agents. Kotte, G., 1986, p.12-16, eng  
41-2326
- Exhibition and demonstration of equipment. Hintikka, J., 1986, p.78-81, eng  
41-2489
- Huzzahs for city's snowfighting program. Langseth, R.L., 1986, p.64-65, eng  
41-2701
- Calculating frost resistance of structural elements. Kuz'min, V.R., 1985, p.95-102, rus  
41-2852
- Dredge-excavation of ground. Ogorodnikov, S.P., 1986, 256p., rus  
41-2913
- Vertical sediment flux beneath annual sea ice, McMurdo Sound, Antarctica. Dunbar, R.B., et al, 1985, p.109-111, eng  
41-2950
- Cryostat with 3He-vapor evacuation. Gershenson, M.E., et al, 1987, p.979-981, eng  
41-3159
- Nitrogen cryostat for study of Moessbauer scattering. Gornachev, V.S., et al, 1987, p.981-983, eng  
41-3160
- Using tractor rippers on frozen grounds. Beliaikov, I.U.I., et al, 1982, p.40-46, rus  
41-3546
- Snow removal in cities, a big problem also in the Soviet Union. Dedul, A., 1987, p.18-20, ita  
41-4101
- Snow emergency: vehicles occasionally equipped with a snow removal blade. Battistoni, R., et al, 1987, p.21-25, ita  
41-4102
- Spring: time to demonstrate methods of snow removal. Bilotta, A., 1987, p.26-34, ita  
41-4103
- Man, sea, technology. Narusbaev, A.A., ed, 1987, 335p., rus  
41-4145
- Subzero engineering. Hills, A., 1986, p.52-56, eng  
41-4273
- Determining the thermal conductivity coefficient for thawed and frozen grounds. Danielian, I.U.S., et al, 1983, p.20-24, rus  
41-4483
- Improvement of parameters and increase in the reliability of mining machines. Ponomarenko, I.U.F., ed, 1986, 82p., rus  
41-4524
- Improving the reliability of 204M excavators under northern conditions. Osipova, T.V., et al, 1986, p.11-16, rus  
41-4525
- Increasing safety of underground mining by using power driven equipment. Kivileva, N.M., 1986, p.25-30, rus  
41-4551
- See also specific types of equipment
- Erosion**
- Snow and avalanche research at the University of Innsbruck. Lackinger, B., 1984, p.155-173, ger  
41-711
- Understanding the Arctic sea floor for engineering. 1982, 141p., eng  
41-893
- Relationship between salt weathering debris production and temperature. Davison, A.P., 1986, p.335-341, eng  
41-1778
- Development and regime of thermal erosion in the BAM zone. Poznanin, V.L., 1986, p.138-142, rus  
41-2831
- Calculating the non-erosive velocity of a stream for sandy ground in freezing weather. Skrebkov, G.P., et al, 1986, p.74-77, rus  
41-3260
- Riverbank erosion in the Colville Delta, Alaska. Walker, J., et al, 1987, p.61-70, eng  
41-3555
- Forms of periglacial erosion in Provence. Journaux, A., 1986, p.131-139, fre  
41-3582
- See also: Avalanche erosion; Glacial erosion; Ice erosion; Shore erosion; Snow erosion; Soil erosion; Water erosion; Wind erosion
- Estuaries**
- Forecasts and the efficiency of fleet performance. Collection of scientific papers. Shchelkanov, A.G., ed, 1985, 105p., rus  
41-487
- Using barge-carrier systems in Arctic transportation. Pavskii, E.I., 1985, p.62-67, rus  
41-492
- Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice. Tregub, G.A., et al, 1986, p.153-158, rus  
41-2169
- Geomorphology of river deltas on the Arctic coast of Siberia. Korotaev, V.N., 1986, p.139-147, eng  
41-2340
- New aquatic tundra plants. Vekhov, N.V., et al, 1986, p.1619-1620, rus  
41-3024
- Ice dams for protecting water areas of northern ports. Bogoslovskii, P.A., et al, 1987, p.78-80, rus  
41-3652
- Evaporation**
- Dynamics and hydrophysical properties of forest litter in the Krasnoyarsk forest steppes. Stakanov, V.D., et al, 1986, p.172-176, rus  
41-816
- Role of evaporation from snow and ice in mass balance of glaciers. Kaser, G., 1986, p.59-63, 185-188, eng  
41-1056
- Peculiarities of water balance structure in different landscapes of Priangar'e. Berkin, N.S., et al, 1986, p.187-193, rus  
41-1375
- Study on land evaporation and dry-wet state of Qinghai-Xizang Plateau. Zeng, Q., et al, 1986, p.131-142, chi  
41-1460
- Radiation and heat regime of some high-mountain biogeocenoses. Kucherenko, V.E., 1986, p.66-86, rus  
41-2880
- Geographic modeling of evaporation from water-bodies of mountainous countries. Gvakharia, V.K., 1986, 114p., rus  
41-3366
- Calculating heat balance constituents of soil surface. Konstantinov, A.R., et al, 1986, p.62-66, eng  
41-3679
- Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., 1986, 186p., rus  
41-3742
- Thermal properties of cryogenic meadow-chernozem soils. Kulikov, A.I., 1984, p.126-130, rus  
41-4090
- Outward flux of vapour from frozen soils at Mayo, Yukon, Canada: results and interpretation. Smith, M.W., et al, 1987, p.143-152, eng  
41-4491
- See also: Ice sublimation; Snow evaporation; Sublimation; Transpiration
- Excavation**
- Peculiarities of rock pressure development in mining excavations when the roof is a difficultly caving permafrost. Popov, S.F., 1985, p.93-97, rus  
41-195
- Simulation of a multi-seam dragline operation in a sub-arctic mine. Bandopadhyay, S., et al, 1986, p.47-54, eng  
41-1027
- Method of selective underground mining and stabilization of rock cavities. Hoerstorfer, G., et al, 1983, 18 col., eng  
41-1773
- Temperature and time effects on the closure of a gravel room in permafrost. Huang, S.L., 1985, p.53-65, eng  
41-2743
- Inadequate norms concerning the increase of winter earthwork costs. Myznikov, I.U.N., 1987, p.41-44, rus  
41-2799
- Organizing construction of the Kureyskaya hydroelectric power plant. Zaltsman, O.M., et al, 1986, p.17-23, rus  
41-2864
- Blasting work in ground and rocks. Kucheriavt, F.I., ed, 1986, 128p., rus  
41-2903
- Using the blow-out method in open mining of placer deposits. Poplavskii, V.A., 1986, p.48-54, rus  
41-2904
- Pest excavation by blasting in channel construction. Frash, G.B., 1986, p.54-61, rus  
41-2905
- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). 1986, 567p., rus  
41-2968
- Classifying frozen ground according to abrasion power. Leshchiner, V.B., et al, 1982, p.8-14, rus  
41-3545
- Using tractor rippers on frozen grounds. Beliaikov, I.U.I., et al, 1982, p.40-46, rus  
41-3546
- Integrated mechanization of earthwork. Degtiarev, A.P., et al, 1987, 335p. (Pertinent p.284-318), rus  
41-3674
- Determining the state of stress in shaft timbering during thawing. Abashin, S.I., et al, 1986, p.28-29, rus  
41-3769
- Finite element method for analysis of frozen earth structures. Soo, S., et al, 1987, p.121-129, eng  
41-4489
- Improvement of parameters and increase in the reliability of mining machines. Ponomarenko, I.U.F., ed, 1986, 82p., rus  
41-4524
- Improving the reliability of 204M excavators under northern conditions. Osipova, T.V., et al, 1986, p.11-16, rus  
41-4525
- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed, 1986, 81p., rus  
41-4546
- New sampling technique for northern placer mines. Riabets, N.I., et al, 1986, p.10-15, rus  
41-4549
- Suction dredges used in placer mining of the North. Vinchenko, V.V., 1986, p.15-19, rus  
41-4550
- Mining technology designed for saving mineral resources. Al'tshuler, V.M., ed, 1987, 94p., rus  
41-4558
- Methods of transporting dumped refractory ore masses. Eremin, G.M., 1987, p.41-44, rus  
41-4559

- Excavation (cont.)**  
See also: Earthwork; Pits (excavation); Rock excavation; Trenching; Tunneling (excavation)
- Expansion**  
See: Thermal expansion
- Expeditions**  
Planned New Zealand antarctic activities. [1986, 26p., eng] 41-382  
Modifications to the 1985/86 New Zealand antarctic research program. [1986, 4 leaves, eng] 41-383  
JARE 25 wintering party activities, 1984-1985. [1986, p.113-137, jpn] 41-384  
Report on the 24th Soviet Antarctic Expedition. [1986, 139p., rus] 41-385  
First time above the North Pole. Stromilov, N.N., [1986, 134p., rus] 41-386  
Operation Deep Freeze 87 end of season report. [1987, Var. p., eng] 41-3164  
Seven expeditions to Spitzbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124  
Snow blizzard in summertime—random notes on observations in Antarctica. Jin, T., [1980, 216p., chi] 41-4125  
Seasonal activity and scientific observations in the 27th Soviet Antarctic Expedition. Maksutov, D.D., [1986, p.5-9, rus] 41-4181  
See also: Traverses
- Expenses**  
See: Cost analysis
- Experimentation**  
Botanical studies in Siberian preservation parks. Koropachinskii, I.I.U., et al., [1986, p.85-88, rus] 41-2458  
Experimental ice navigation of diesel ship. Burkov, G., et al., [1986, p.42-45, rus] 41-3204
- Exploration**  
Biogeochemical exploration for mineral deposits in forest lands and taiga. Kovalevskii, A.L., [1986, p.32-37, rus] 41-199  
Geochemical exploration in economically developing parts of taiga. Zagoskin, V.A., et al., [1986, p.145-148, rus] 41-200  
Biochemical indications of gold-ore deposits in permafrost. Ursova, O.A., [1986, p.226-227, rus] 41-202  
Arctic R & D—a niche for Finland. Jauho, P., [1986, p.21-24, eng] 41-2263  
Future of sub-arctic and arctic offshore development in Canada. Matheson, J.R., [1986, p.149-159, eng] 41-2270  
Easo—SINTEF Norwegian Arctic Research Program. Setchfield, T.L., [1986, p.167-178, eng] 41-2272  
Tomorrow's technology in sub-Arctic and Arctic hydrocarbon exploration. Adams, P.F., [1986, p.312-316, eng] 41-2281  
Atlas of the polar regions. [1985, 66p., eng] 41-2884  
Biochemical anomalies in permafrost zone and their interpretation. Lobanova, A.B., [1987, p.170-172, eng] 41-3163
- Explosion effects**  
Effect of snow-cover blasting on erosion. Bunza, G., et al., [1984, p.181-190, ger] 41-713  
On the splitting of icebergs—natural and induced. Diemand, D., et al., [1987, p.379-385, eng] 41-2446  
Saline ice under explosive loads and penetration of sea ice. Larson, D.B., [1986, p.365-384, eng] 41-2666  
Blasting work in ground and rocks. Kucheraviy, F.I., ed., [1986, 128p., rus] 41-2903  
On the least resistance line of curvilinear blow-out charges detonated in permafrost. Afanas'ev, E.M., et al., [1986, p.61-66, rus] 41-2906  
Blasting and blast effects in cold regions. Part 2: underwater explosions. Mellor, M., [1986, 56p., eng] 41-3020  
Revised guidelines for blasting floating ice. Mellor, M., [1986, 37p., eng] 41-3814  
See also: Blasting
- Explosives**  
Blasting-mechanical method of excavating frozen ground. Rzhnevskii, V.A., et al., [1986, p.16-18, rus] 41-1526  
Project ice buster. Miles, R.T., et al., [1986, p.623-643, eng] 41-2681  
Losses of explosives residues on disposable membrane filters. Jenkins, T.F., et al., [1987, 25p., eng] 41-3820
- Exposure**  
Vegetation of snow patches, Gulf of Richmond, northern Quebec. Morin, H., et al., [1986, p.1515-1524, fr] 41-2367  
See also: Slope orientation
- Extraterrestrial ice**  
Residues from dispersions of clay and ice on Martian polar deposits. Saunders, R.S., et al., [1986, p.94-104, eng] 41-527  
Ice and snow of the north polar caps of Mars and Earth. Foster, J., et al., [1986, p.223-235, eng] 41-959  
Ices in the solar system; proceedings of the workshop, 1984. [1985, 954p., eng] 41-1693  
Physics of ice: some fundamentals of planetary glaciology. Whalley, E., [1985, p.9-37, eng] 41-1694  
Phase transitions in solid methane at high pressure. Trappeniers, N.J., [1985, p.49-58, eng] 41-1696
- Clathrate hydrates in the solar system. Miller, S.L., [1985, p.59-79, eng] 41-1697  
Outer solar system materials: a color systematic. Hartmann, W.K., et al., [1985, p.181, eng] 41-1704  
Evolution of ices from interstellar space to the solar system. Greenberg, J.M., et al., [1985, p.185-204, eng] 41-1705  
Formation history and environment of cometary nuclei. Yamamoto, T., [1985, p.205-219, eng] 41-1706  
Solar energetic ions and interplanetary grains. Strazzulla, G., et al., [1985, p.273-285, eng] 41-1707  
Sputtering of water ice at 30-140 K by 0.5-6.0 keV H(+) and Ne(+) ions. Bar-Nun, A., et al., [1985, p.287-299, eng] 41-1708  
Bombardment of the surface of ice objects. Johnson, J.E., et al., [1985, p.301-315, eng] 41-1709  
Radiations of water, sulfur dioxide and methane ices. Perotti, L.L., et al., [1985, p.317-335, eng] 41-1710  
Status of the icy conglomerate model. Whipple, J., [1985, p.343-366, eng] 41-1711  
Snow: formation temperature of the cometary nucleus. De, A.H., [1985, p.367-387, eng] 41-1712  
Condensation and agglomeration of cometary ice: the HDO ratio as tracer. Ip, W.-H., [1985, p.389-395, eng] 41-1713  
Amorphous and crystalline ices in cometary nuclei. Smoluchowski, R., [1985, p.397-406, eng] 41-1714  
Composition and structure of the comet nucleus. Klinger, J., [1985, p.407, eng] 41-1715  
Amorphous-crystalline phase transition and the light curve of comet P/Halley. Kawan, H., et al., [1985, p.419-428, eng] 41-1716  
Model for an icy halo in comets. Crifo, J.F., et al., [1985, p.429-442, eng] 41-1717  
Ice in cometary grains. Cress, H., [1985, p.443-452, eng] 41-1718  
S2: a clue to the origin of cometary ice? A'Hearn, M.F., et al., [1985, p.463-471, eng] 41-1719  
Effect of dust halos and dust mass on nuclear outgassing. Mendis, D.A., [1985, p.477-504, eng] 41-1720  
Cometary ices. Delsemme, A.H., [1985, p.505-517, eng] 41-1721  
Martian polar caps: a review. Masson, J., [1985, p.521-534, eng] 41-1722  
Mars: long term changes in the state and distribution of H2O. Fanale, F.P., et al., [1985, p.535-564, eng] 41-1723  
Subsurface ice and permafrost on Mars. Andersen, M.M., [1985, p.565-581, eng] 41-1724  
Hydro lithosphere and subsurface ice on Mars. Bati, R., [1985, p.607-617, eng] 41-1725  
Icy satellites, rings and Pluto. Klinger, J., [1985, p.621-629, eng] 41-1726  
Accretion of icy satellites of Jupiter and Saturn. Ahrens, T.J., et al., [1985, p.631-654, eng] 41-1728  
Composition and structure of planetary rings. Burns, J.A., [1985, p.655-679, eng] 41-1729  
Ices in planetary rings. Smoluchowski, R., [1985, p.681-689, eng] 41-1730  
Small, icy satellites of Saturn. Cruikshank, D.P., [1985, p.691-697, eng] 41-1731  
Shapes and strengths of small icy satellites. Farinella, P., et al., [1985, p.699-710, eng] 41-1732  
Icy satellites of Uranus. Brown, R.H., [1985, p.711-729, eng] 41-1733  
Atmospheres of icy bodies. Owen, T., [1985, p.731-740, eng] 41-1734  
Interaction of liquid hydrocarbons and water-ice or ammonia hydrates. Lunine, J.I., et al., [1985, p.741-757, eng] 41-1735  
Importance of the tectonic motions on Ganymede. Forni, O.P., et al., [1985, p.759-766, eng] 41-1736  
Some remarks on the geology of Ganymede. Bianchi, R., et al., [1985, p.767-779, eng] 41-1737  
Tectonics of Valhalla basin on Callisto. Thomas, P.G., et al., [1985, p.781-790, eng] 41-1738  
Sulfur dioxide ice on Io. Cruikshank, D.P., et al., [1985, p.805-815, eng] 41-1739  
Methane ice on Triton and Pluto. Cruikshank, D.P., et al., [1985, p.817-827, eng] 41-1740  
Geology of icy satellites. McKinnon, W.B., [1985, p.829-856, eng] 41-1741  
Summary of the highlights of the conference. Smoluchowski, R., [1985, p.859-864, eng] 41-1742  
Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270  
Amorphous water ice and its ability to trap gases. Bar-Nun, A., et al., [1987, p.2427-2435, eng] 41-3575  
Sedimentary deposits in the northern lowland plains, Mars. Lucchitta, B.K., et al., [1986, p.E166-E174, eng] 41-3749  
Icy Galilean satellite reflectance spectra: less ice on Ganymede and Callisto? Spencer, J.R., [1987, p.99-110, eng] 41-3964  
Thermokarst features on Mars. Costard, F., [1986, p.123-131, fre] 41-4423
- Extraterrestrial material**  
See: Cosmic dust
- Falling bodies**  
Study of the motion of bodies simulating the fall of ice crystals. Podzimek, J., [1982, p.103-106, eng] 41-7  
Impactation of snowflakes on car windshields. King, W.D., et al., [1987, p.149-154, eng] 41-2762  
Technique for measuring the rotational properties of falling oblate ice spheroids. Baitan, L.J., [1985, p.665-666, eng] 41-3217
- Fallout**  
Radioactive cesium from the Chernobyl accident in the Greenland ice sheet. Davidson, C.I., et al., [1987, p.633-634, eng] 41-4225  
Be-10 concentrations in Greenland ice. Monaghan, M.C., [1987, p.197-203, eng] 41-4279  
Sulphuric acid in the antarctic ice sheet. Legrand, M., et al., [1987, p.671-676, eng] 41-4325  
Firm layer contamination by radioactive fallout. Ambach, W., et al., [1986, p.1173-1176, eng] 41-4360
- Farming**  
See: Agriculture
- Fast ice**  
Nature of winter ruptures in sea ice covers. Gorbunov, I.U.A., et al., [1986, p.131-134, rus] 41-121  
Seasonal variation of chlorophyll-a in fast ice near Davis Station. Lu, P., [1986, p.11-19, chi] 41-397  
Primary production of inshore water near Davis Station. Lu, P., et al., [1986, p.38-43, chi] 41-398  
Nanoplankton in the waters near Davis Station. Mao, X., et al., [1986, p.130-135, chi] 41-404  
Unloading of a large tanker near Mirnyy Station. Kozlovskii, A.M., et al., [1986, p.116-119, rus] 41-1267  
Use of sea ice for cargo unloading. Nazintsev, I.U.L., et al., [1986, p.120-126, rus] 41-1268  
There are different types of ice. Berdnikov, D., [1986, p.46-47, rus] 41-1399  
Exogenic relief formation in the Far East. Skrylnik, G.P., ed., [1985, 155p., rus] 41-1908  
Quantitative evaluation of the role of near-shore ice in shoreline modification in the Okhotsk Sea. Stepanova, L.E., [1985, p.90-98, rus] 41-1909  
All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. [1986, 268p., rus] 41-2384  
Recent trends in studying the ecology of Polar seas of the Arctic. Matishov, G.G., [1986, p.1-5, rus] 41-2385  
Seismic cone penetration testing, offshore of the Mackenzie Delta. Campanella, R.G., et al., [1987, p.154-159, eng] 41-2979  
Studies of ice-edge zones of Arctic seas. Nikolaev, I.U.V., et al., [1986, p.131-138, eng] 41-3264  
Ice diatom floras in Arthur Harbor. Krebs, W.N., et al., [1987, p.163-171, eng] 41-3427  
Determining some characteristics of fast and drifting ice with the meteorological radar-2 station. Komarov, A.V., et al., [1985, p.66-70, rus] 41-3430  
Algal photosynthesis under fast ice at Showa Station. Oh, H., et al., [1986, p.34-42, eng] 41-3631  
Position of organic matter under fast ice at Lützw-Bay. Matsuda, O., et al., [1986, p.55-66, eng] 41-3632  
Krill overwintering strategy under fast ice in Lützw-Holm Bay. Kikuchi, K., et al., [1986, p.67-85, eng] 41-3633
- Fatigue (mat. fab.)**  
Fatigue and frost-thaw resistance of epoxy mortar. Biswas, M., et al., [1985, p.33-37, eng] 41-647
- Fauna**  
See: Animals
- Feeding (hydrology)**  
See: Alimentation
- Fences**  
See: Snow fences
- Fiber optics**  
Excess loss of single-mode jacketed optical fiber at low temperature. Yabuta, T., et al., [1983, p.2356-2362, eng] 41-486  
Non-metallic optical fiber cable for use under low temperature. Ogi, M., et al., [1981, p.12(2-1)-12(2-4), eng] 41-660  
Optical cable properties under ice. Tanaka, M., et al., [1981, p.22(1)-22(4), eng] 41-661
- Fibers**  
Low temperature excess loss of loose tube fiber cables. Stuefflotten, S., [1982, p.4300-4307, eng] 41-263  
Transmission loss of coated single-mode fiber at low temperatures. Katsuyama, Y., et al., [1980, p.4200-4205, eng] 41-264  
X ray attenuation at low temperatures in polymer silica fibers. Barnes, C.E., et al., [1981, p.25-34, eng] 41-580  
Response of irradiated optical waveguides at low temperatures. Taylor, E.W., et al., [1981, p.40-50, eng] 41-581  
Cold-induced losses in loose-sheath fiber-optic cables. Holliday, V.M., et al., [1981, p.77-79, eng] 41-582  
Survivability of Army fiber optics systems. Wichansky, H., et al., [1981, p.110-117, eng] 41-583
- Films**  
See: Water films



- Filters**  
Self-cleaning gas turbines in an Arctic environment. Retka, R.J., et al, [1987, p.79-84, eng] 41-2768  
Fortran subroutines for zero-phase digital frequency filters. Albert, D.G., [1986, 26p., eng] 41-3648  
Losses of explosives residues on disposable membrane filters. Jenkins, T.F., et al, [1987, 23p., eng] 41-3820
- Filtration**  
See: Seepage
- Fines**  
Bound water and ice transformations in rock and ground systems. Ershov, E.D., [1986, p.8-18, rus] 41-2081  
Formation of segregated ice and frost heave of clays. Zamolotchkova, S.A., [1986, p.127-136, rus] 41-2093  
Experimental studies of injected ice formation in fine-grained rocks. Ershov, E.D., et al, [1986, p.136-149, rus] 41-2094  
Permafrost formation in littoral and sublittoral zones of northern Eurasia. Maslov, A.D., [1986, p.79-85, rus] 41-2539  
Composition and behavior of sand-clay soils under vibration. Ostrovskaia, O.V., [1986, p.108-111, rus] 41-2542  
Nature of fines produced in aggregate processing. Pintner, R.M., et al, [1987, p.10-21, eng] 41-2765  
Methods of classifying frost-heave parameters for compiling a map of rock-heave types. Lebedenko, I.U.P., [1986, p.83-96, rus] 41-2824  
Cryogenic-inversion ridges of northwestern Siberia. Bolikhovskii, V.F., et al, [1986, p.128-132, rus] 41-2829  
Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p., rus] 41-2911  
Freezing of water and melting of ice in disperse rocks. Ershov, E.D., [1986, p.55-67, eng] 41-3016  
Relationship of composition and behavior of sandy-clayey soils upon vibration. Ostrovskaia, O.V., [1986, p.112-115, eng] 41-3018  
Seismo-acoustic studies of frozen and thawed calcareous clays. Voronkov, O.K., et al, [1985, p.88-95, rus] 41-3129  
Construction properties of gley clayey ground. Popov, A.F., [1986, p.16-22, rus] 41-3393  
Numerical modeling of loess structure for forecasting its sustained strength. Anikin, V.S., et al, [1986, p.34-42, rus] 41-3394  
Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed, [1986, 165p., rus] 41-3428  
Deformation of pore-space structure in freezing fines. Lebedenko, I.U.P., [1987, p.50-63, rus] 41-4622  
See also: Frozen fines
- Finland**  
Sludge dewatering at sewage treatment plants in Finland. Puolanne, J., [1981, p.107-117, eng] 41-392  
Some practical aspects of graphical ice reduction. Hyvärinen, V., [1986, p.25-29, eng] 41-534  
Winter and summer low flows in Finland. Kuusisto, E., [1986, p.31-38, eng] 41-535  
Program of collecting data of ice jams. Laasanen, O., [1986, p.39-43, eng] 41-536  
River ice conditions in Finland. Maunula, M., [1986, p.45-54, eng] 41-537  
Numerical modeling of river ice conditions in Finland. Reiter, P.H., et al, [1986, p.305-317, eng] 41-539  
Northern technical research at the University of Oulu. Ukkola, A., [1986, p.113-118, eng] 41-968  
Ice information systems for marine operations. Leppäranta, M., [1986, p.57-70, eng] 41-1090  
Experimental frost shattering of some precambrian rocks, Finland. Lautridou, J.P., et al, [1986, p.89-100, eng] 41-1847  
Arctic R & D—a niche for Finland. Jauho, P., [1986, p.21-24, eng] 41-2263  
Offshore technology in Finland—present state and future perspectives. Potila, A., [1986, p.25-35, eng] 41-2264  
Possibilities for Arctic heavy transportation. Wärtilä, K.L., [1986, 20p., eng] 41-2284  
Introduction to the "International Winter Road Congress, 1986". Suonio, V., [1986, p.32-34, eng] 41-2486  
Advance in ice mechanics in Finland. Maantanen, M., [1987, p.7-14, eng] 41-2931  
Snow water equivalent from satellite data and spectrometry. Kuittinen, R., [1986, p.181-189, eng] 41-3896
- Kallavesi Lake**  
Date of break-up of lake ice as a climate index. Ruosteenoja, K., [1986, p.89-99, eng] 41-3758
- Kuusamo**  
Factors controlling ground frost on an alpine mire in Kuusamo, Finland. Koutaniemi, L., et al, [1986, p.60-67, fin] 41-187
- Fires**  
Fire protection of Arctic offshore structures. Merrick, P.E.D., [1986, p.223-237, eng] 41-2276  
Fire protection engineering in modular Arctic facilities. Merrick, P.E.D., [1986, p.238-250, eng] 41-2277
- Scientific-technological progress and the development of northern natural resources. Chistobaev, A.I., et al, [1985, p.42-51, rus] 41-3435  
See also: Forest fires
- Firm**  
Calculation and prediction of the regime and distribution of mountain glaciers. Tokmagambetov, G.A., et al, [1985, 159p., rus] 41-518  
Strain rate measurements on a firm pit, Austria. Eisner, H., et al, [1984, p.169-176, eng] 41-633  
Follow-up measurements of Pasterze (Glockner group) in 1984. Wakonigg, H., [1984, p.223-228, ger] 41-637  
Refraction correction for radio echo-sounding of ice overlain by firm. Rasmussen, L.A., [1986, p.192-194, eng] 41-678  
Measurements of deformation in a firm pit. Ambach, W., et al, [1985, p.211-222, ger] 41-717  
Glaciology of mountainous regions. Suslov, V.F., ed, [1986, 136p., rus] 41-769  
Experimental determination of water movement in the Firm layers of Abramov Glacier. Glazyrin, G.E., et al, [1986, p.110-117, rus] 41-781  
Formulas for calculating glacier mass balance. Xie, Z., et al, [1986, p.105-110, 223-227, eng] 41-1062  
Proposal of a constitutive equation of temperate firm. Ambach, W., et al, [1986, p.1-9, eng] 41-1299  
Role of glaciers in the discharge of Pamiro-Alai rivers. Kemmerikh, A.O., [1985, p.79-84, rus] 41-1817  
Age distribution of air bubbles trapped in polar ice. Enting, I.G., [1986, p.2841-2854, eng] 41-2576  
Firm studies at upstream B, Siple Coast. Alley, R.B., et al, [1985, p.65-66, eng] 41-2627  
Nitrate variability in South Pole and Ross Ice Shelf snow and firm. Laird, C.M., et al, [1985, p.68-69, eng] 41-2629  
Rheological properties of temperate firm. Ambach, W., et al, [1985, p.71-77, eng] 41-4130  
Measurement of firm structure. Alley, R.B., [1986, p.391-396, eng] 41-4294  
Meltwater seepage on temperate and cold glaciers. Bazhev, A.B., [1986, p.50-55, 165-170, rus] 41-4339  
Forecasting glacial runoff in river basins of Central Asia. Konovalov, V.G., [1986, p.75-78, 187-191, rus] 41-4344  
Role of major floods in glacier basins. Johnson, P.G., et al, [1986, p.82-87, 195-200, rus] 41-4346  
Texture of polar firm for remote sensing. Alley, R.B., [1987, p.1-4, eng] 41-4426
- Firm stratification**  
Nitrate flux on the Ross Ice Shelf and its relation to solar cosmic rays. Zeller, E.J., et al, [1986, p.1264-1267, eng] 41-2019
- Flexural strength**  
Development of composite members for Arctic offshore structures. Shioya, T., et al, [1986, p.660-677, eng] 41-1123  
Flexural behavior of frozen soil. Soo, S., et al, [1986, p.355-361, eng] 41-1161  
EG/AD/5: a new type of model ice for refrigerated towing tanks. Timco, G.W., [1986, p.175-195, eng] 41-1288  
Environmental exposure of carbon/epoxy composite material systems. Givler, R.C., et al, [1982, p.137-147, eng] 41-1991  
Transport over floating ice sheets. Hinchey, M.J., [1987, p.321-328, eng] 41-2439  
Frost resistance and hardening of concrete. Ruohomäki, J., [1986, 35p. + append., fin] 41-2523  
Effects of freezing temperature on the flexural properties of urea ice. Hara, Y., et al, [1986, p.31-37, jpn] 41-3781
- Floating ice**  
"Larus"—hovercraft for the Arctic. Malmberg, S., [1986, p.15, eng] 41-87  
Floating ice roads and runways: critical speed phenomena. Hinchey, M.J., [1986, p.139-147, eng] 41-176  
Oil in ice computer simulation model. Wotherspoon, P.D., et al, [1986, p.41-46, eng] 41-343  
Seas of the World Ocean. Sukhovet, V.F., [1986, 288p., rus] 41-556  
Ice islands as locations for arctic data collection. Sackinger, W.M., [1986, p.493-497, eng] 41-953  
Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al, [1986, p.175-196, eng] 41-1095  
Recent developments in the analysis of floating ice plates. Vinogradov, A.M., [1986, p.228-240, eng] 41-1099  
Site selection for structures on a floating ice shelf, Antarctica. Sharma, S.S., [1986, p.1093-1105, eng] 41-1147  
Viscoelasticity of floating ice plates under loads. Hui, D., [1986, p.135-143, eng] 41-1212  
Response of floating ice beams and plates with partial flooding. Kerr, A.D., [1986, p.75-86, eng] 41-1584  
Time and temperature effects in the performance of drilling ice platforms. Vinogradov, A.M., [1986, p.397-405, eng] 41-1607  
Generation and trajectories of ice islands and multiyear ice flows. Sackinger, W.M., [1986, p.579-594, eng] 41-1620  
Ice thickness inductor probe. Warren, H.B., Jr., et al, [1983, 10 col., eng] 41-1675
- Structures on a floating ice shelf in Antarctica. Sharma, S.S., [1986, p.298-311, eng] 41-2280  
Applications of spray ice and rubble ice for Arctic offshore exploration. Goff, R.D., et al, [1987, p.1-7, eng] 41-2395  
Drilling of a well from a sprayed floating ice platform Cape Allison C-47. Masterson, D.M., et al, [1987, p.9-16, eng] 41-2396  
Viscoelasticity of flooded and spray ice using flatjacks. Spencer, P.A., et al, [1987, p.17-23, eng] 41-2397  
Transport over floating ice sheets. Hinchey, M.J., [1987, p.321-328, eng] 41-2439  
Ice jam characteristics, Liard-Mackenzie rivers confluence. Prowse, T.D., [1986, p.653-665, eng] 41-2476  
Low-velocity impact penetration of an ice layer over water. Schmidt, R.M., et al, [1986, p.439-449, eng] 41-2669  
Feasibility tests of autonomous antenna deployment through ice. Hrubec, J.D., et al, [1986, p.461-471, eng] 41-2671  
Floating ice shelves related to ice age climates. Denton, G.H., et al, [1986, p.509-513, eng] 41-2801  
Reflection experiment on a floating ice platform. Hajnal, Z., et al, [1987, p.201-208, eng] 41-2948  
Contribution to the study of sediments in the Bransfield Strait region. Silva Martins, L.R., et al, [1987, p.127-146, por] 41-3156  
Coupled marine ice-stream-ice-shelf model. Muszynski, I., et al, [1987, p.3-15, eng] 41-3590  
Role of standing waves in dynamics of Weddell Sea ice sheet. Seidov, D.G., et al, [1986, p.90-93, eng] 41-3681  
Revised guidelines for blasting floating ice. Mellor, M., [1986, 37p., eng] 41-3814  
Experiments on freeze-bonding between ice blocks in floating ice rubble. Ettema, R., et al, [1986, p.397-403, eng] 41-4295  
See also: Ice floes
- Floating structures**  
Combined Production and Storage System (COMPASS) used in ice-infested waters. Pass, H., [1986, p.633-659, eng] 41-1122  
Protection of structures from pressure of moving sea ice. Ice tests performed at the "Kemi I" lighthouse, [1985, p.19, rus] 41-1514  
Cooperative construction of drilling assemblies. [1985, p.33, rus] 41-1516  
Drilling offshore western Greenland—ice. Hammett, D.S., et al, [1978, p.119-128, eng] 41-2122  
PCSP's floating research station. [1987, p.6, eng] 41-2320
- Flood control**  
Calibrating HEC-2 in a shallow, ice-covered river. Calkins, D.J., et al, [1986, 25 refs., eng] 41-2531  
Ice blasting. Tavrizov, V.M., [1986, 136p., rus] 41-2646  
Floodplain land cover mapping using thematic mapper data. Kerber, A.G., et al, [1986, p.1057-1064, eng] 41-3994  
Glacial floods and their control. Mochalov, V.P., et al, [1986, p.104-108, 216-219, rus] 41-4351
- Flood forecasting**  
Snowmelt simulation of short living snowpacks. Bauwens, W., [1985, p.139-155, eng] 41-1491
- Flooding**  
Role of ground frost, snow cover, ice break-up and flooding in the fluvial processes of the Oulanka River, NE Finland. Koutaniemi, L., [1984, p.127-161, eng] 41-265  
All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings. [1985, 126p., rus] 41-1362  
Thermal and moisture regimes of clay soils in aeration zone of construction sites in the Far East and the prevention of flooding. Fedorov, V.I., [1985, p.93-104, rus] 41-1364  
Response of floating ice beams and plates with partial flooding. Kerr, A.D., [1986, p.75-86, eng] 41-1584  
Viscoelasticity of flooded and spray ice using flatjacks. Spencer, P.A., et al, [1987, p.17-23, eng] 41-2397  
Calculating the burst and flooding of moraine-dammed glacial lakes. Keremkulov, V.A., et al, [1986, p.110-113, 221-224, rus] 41-4353
- Floodplains**  
Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, [1987, 144p., rus] 41-2983  
Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed, [1986, 135p., rus] 41-4572
- Floods**  
Size distribution of surficial bed material during a snowmelt flood. Andrews, E.D., et al, [1986, p.191-197, eng] 41-211  
Natural hazards caused by glaciers. Björnsson, H., et al, [1986, p.33-52, eng] 41-473  
Program of collecting data of ice jams. Laasanen, O., [1986, p.39-43, eng] 41-536  
Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed, [1986, 84p., rus] 41-543  
Calculating hydrological characteristics of the Mertsbakher Lake outburst. Glazyrin, G.E., et al, [1986, p.36-43, rus] 41-546

**Floods (cont.)**

- Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed. [1984, 110p., rus] 41-721
- Influence of forestry and forest complexes on river runoff. Mishon, V.M., et al. [1986, p.71-75, rus] 41-1368
- Formula for calculating runoff in the Lena River basin. Nemerinskaia, Zh.N., [1986, p.3-8, rus] 41-2648
- Improving the map of spring-flood runoff layer of the Chukchi Peninsula rivers. Boiarintsev, E.L., [1986, p.8-17, rus] 41-2649
- Professor Mathews, outburst floods, and other glaciological disasters. Clarke, G.K.C., [1986, p.859-868, eng] 41-2685
- Spatial analysis of snow- and rain-generated highflows in southern Ontario. Irvine, K.N., et al. [1987, p.140-149, eng] 41-4076
- Rising sea level and collapsing antarctic ice. Hughes, T.J., [1987, p.89-100, eng] 41-4099
- Maximum river runoff in the Angara basin. Leksakova, V.D., [1987, 132p., rus] 41-4108
- Water release from a forested snowpack during rainfall. Kattelmann, R., [1987, p.265-272, eng] 41-4316
- Role of major floods in glacier basins. Johnson, P.G., et al. [1986, p.82-87, 195-200, rus] 41-4346

**Floors**

- Floor surface temperature in residential buildings on slab foundations. Rudykh, O.L., et al. [1985, p.113-114, rus] 41-333
- Study of heat loss through basement floors. Richmond, W.R., et al. [1986, p.336-350, eng] 41-1381

**Flora**

See: Plants (botany); Vegetation

**Flow**

See: Air flow; Fluid flow; Glacier flow; Laminar flow; Pipe flow; River flow; Shear flow; Stream flow; Turbulent flow; Water flow

**Flow measurement**

- Brunt Ice Shelf flow, 1974-1985, from Landsat images. Simmons, D.A., [1986, p.252-254, eng] 41-686
- Supercritical flume for measuring sediment-aden streamflow. Baker, M.B., Jr., [1986, p.847-851, eng] 41-3138

**Flow rate**

- Blockage of flow resulting from freezing of liquid. Creighton, D.L., et al. [1978, p.37-42, eng] 41-468
- Debris-influenced sliding laws and basal debris balance. Shoemaker, E.M., [1986, p.224-231, eng] 41-682
- Effects of ice thickness and surface slope on glacier flow. Kamb, B., et al. [1986, p.267-284, eng] 41-688
- Antarctica: measuring glacier velocity from satellite images. Lucchitta, B.K., et al. [1986, p.1105-1108, eng] 41-962
- Snow/water mixture flow in a pipe. Umemura, T., et al. [1986, p.207-214, jpn] 41-2604
- Methods of calculating mudflow characteristics. Vinogradov, I.U.B., [1985, p.83-89, rus] 41-2730
- Tbilisa Glacier (glaciological and hydrometeorological investigations). Giginishvili, G.N., ed. [1986, 116p., rus] 41-3367
- Contemporary methods in antarctic cartography. Reshetov, E.A., et al. [1986, p.23-25, rus] 41-3533
- Accelerated motion in a glacier approaching surge. Kamb, B., et al. [1987, p.27-46, eng] 41-3593
- Flow and thickness of Riiser-Larsenisen, Antarctica. Orheim, O., et al. [1986, p.5-22, eng] 41-4093
- Riiser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al. [1986, p.23-31, eng] 41-4094
- Recent advance of the Ross Ice Shelf, Antarctica. Jacobs, S.S., et al. [1986, p.464-474, eng] 41-4302
- Hydraulic conveying of snow. Tokunaga, Y., et al. [1987, p.59-66, jpn] 41-4320
- See also: Water transport

**Fluid dynamics**

- Snow/water mixture flow in a pipe. Umemura, T., et al. [1986, p.207-214, jpn] 41-2604
- Fluid dynamical analysis of powder snow avalanches at Maseguchi in Niigata. Fukushima, Y., [1987, p.1-8, jpn] 41-3753

**Fluid flow**

- Univariate single-phase Stefan problem of movement in liquid phase. Kulagina, N.A., [1985, p.36-49, rus] 41-2350

See also: Air flow; Glacier flow; Laminar flow; Pipe flow; River flow; Shear flow; Stream flow; Turbulent flow; Water flow

**Fluid infiltration**

See: Seepage

**Fly ash**

- Fly ash and concrete durability. Klier, P., et al. [1987, p.1043-1069, eng] 41-3718
- Evaluation and prediction of concrete durability—Ontario Hydro's experience. Sturup, V., et al. [1987, p.1121-1154, eng] 41-3721
- Freeze thaw durability of concretes with fly ash and microsilica. Johnston, C., [1987, p.1183-1204, eng] 41-3723

- Durability of concrete containing cementing materials in sea water. Malhotra, V., et al. [1987, p.1227-1258, eng] 41-3725

**Fog**

See: Ice fog; Supercooled fog

**Fog dispersal**

- Possibilities of dispersing supercooled stratiform clouds and fog of large vertical extension. Voronov, G.S., [1986, p.31-43, rus] 41-1449
- Forecasting fog dissipation time and visibility improvement with stratus conditions. Koshelenko, I.V., [1986, p.50-58, rus] 41-2637

**Fog formation**

- Ice and fog: detection and warning systems. December 1985-November 1986 (citations from the NTIS database). [1986, 33p., eng] 41-4128

**Foliage**

See: Forest canopy

**Footings**

See: Foundations

**Forecasting**

- Permafrost distribution in central Canada: applications of a climate-based predictive model. Nelson, F.E., [1986, p.550-569, eng] 41-4137
- See also: Avalanche forecasting; Flood forecasting; Frost forecasting; Ice forecasting; Long range forecasting; Permafrost forecasting; Runoff forecasting; Weather forecasting

**Forest canopy**

- Radiation budget of a subarctic woodland canopy. Lafleur, P., et al. [1986, p.172-176, eng] 41-212
- Monte Carlo simulation of snow depth in a forest. Woo, M.-K., et al. [1986, p.864-868, eng] 41-445
- Predicting forest snow water equivalent. Bergman, J.A., [1985, p.154-162, eng] 41-449
- Streamflow generation from subalpine forests. Troendle, C.A., [1985, p.240-247, eng] 41-450
- Simulation of airborne snow water equivalent measurement errors made over a forested watershed. Vogel, R.M., et al. [1985, p.248-255, eng] 41-451
- Forest and avalanches. Sonnier, J., [1985, p.53-58, fre] 41-864
- Fire effect on Siberian forests. Evdokimenko, M.D., [1984, p.56-65, rus] 41-1080
- Simulation of snow depth in a forest. Woo, M.-K., et al. [1985, p.44-54, eng] 41-1483
- Influence of boreal forest cover on the chemical composition of snowcover. Jones, H.G., [1984, p.126-138, eng] 41-1953
- Snow water reserves in taiga zone. Rubtsov, M.V., et al. [1986, p.11-16, rus] 41-2598
- Variable effects on spectral response of simulated balsam fir canopies. Ranson, K.J., et al. [1986, p.649-658, eng] 41-2739
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilibaev experimental forest taken as an example). Zubareva, R.S., ed. [1986, 158p., rus] 41-2873
- Comparison of leaf and canopy reflectance of subarctic forests. Kodama, Y., et al. [1986, p.809-811, eng] 41-3848
- Snow accumulation in the Khmar-Daban forests. Onuchin, A.A., [1985, p.109-119, rus] 41-3873
- Water release from a forested snowpack during rainfall. Kattelmann, R., [1987, p.265-272, eng] 41-4316
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernen'kova, T.V., [1987, p.147-157, rus] 41-4571

**Forest ecosystems**

- Balsam poplar in northern Alaska. Edwards, M.E., et al. [1985, p.271-277, eng] 41-1248
- Pine needles unable to survive rapid temperature changes. Rodionov, V.S., et al. [1985, p.934-939, rus] 41-1827
- Development and application of an upland boreal forest succession model. Moorhead, D.L., [1985, 170p., eng] 41-2584
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilibaev experimental forest taken as an example). Zubareva, R.S., ed. [1986, 158p., rus] 41-2873
- Characteristics of forest resources and their use in the Bilibaev experimental and model forest. Smolonogov, E.P., et al. [1986, p.3-15, rus] 41-2874
- Classification of the lichen and green-moss pine forests of the northwestern USSR. Sambuk, S.G., [1986, p.1468-1479, rus] 41-3023

**Forest fires**

- Forest fire effect on chemical composition of snow cover. Ivanov, A.V., [1986, p.180-186, rus] 41-131
- Early results of the Rosie Creek Fire Research Project 1984. Juday, G.P., ed. [1985, 46p., eng] 41-570
- Productivity of forest phytocenoses. Elagin, I.N., ed. [1984, 149p., rus] 41-1078
- Fire effect on Siberian forests. Evdokimenko, M.D., [1984, p.56-65, rus] 41-1080
- Influence of paludification and forest fires on forest development. Glebov, F.Z., et al. [1984, p.133-141, rus] 41-1083
- Forest fire spread rates estimated from infrared images. Valendik, E.N., et al. [1985, p.777-788, eng] 41-1444
- Fir trees. Krylov, G.V., et al. [1986, 238p., rus] 41-2259

- Lichen pine forests. Listov, A.A., [1986, 181p., rus] 41-2288

- Methods of forest interpretation on texture-selective images. Kravtsova, V.I., [1986, p.55-66, rus] 41-2304

- Interrelationships among components of biogeocenoses in southern taiga. Smirnov, A.V., ed. [1986, 120p., rus] 41-2898

- Role of fires in taiga paludification. Liakhova, I.G., [1986, p.75-80, rus] 41-2899

- Forest fire effect on tundra vegetation. Polozova, T.G., [1986, p.1657-1663, rus] 41-3025

- Modeling of processes in landscape-geochemical systems. Sysuev, V.V., [1986, 301p., rus] 41-3512

- Remote sensing techniques used in solving geobotanical problems. Sharapov, V.N., ed. [1986, 191p., rus] 41-3970

- Remote sensing techniques of studying taiga after forest fires. Furiaev, V.V., [1986, p.147-159, rus] 41-3971

**Forest land**

- Forest fire effect on chemical composition of snow cover. Ivanov, A.V., [1986, p.180-186, rus] 41-131

- Structure and dynamics of forest landscapes in Karelia. Belousova, N.A., ed. [1985, 184p., rus] 41-189

- Types of landscapes in the Karelian ASSR. Volkov, A.D., et al. [1985, p.4-16, rus] 41-190

- Radiation budget of a subarctic woodland canopy. Lafleur, P., et al. [1986, p.172-176, eng] 41-212

- Integrated model of snowmelt quality for boreal forest sites. Roberge, J., et al. [1985, p.69-83, eng] 41-1486

- Snowpack depletion in a forested catchment. Buttle, J.M., et al. [1985, p.267-271, eng] 41-1503

- Snow water equivalent over a forest. Carroll, T.R., et al. [1984, p.101-115, eng] 41-1951

- Methods of forest interpretation on texture-selective images. Kravtsova, V.I., [1986, p.55-66, rus] 41-2304

- All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks. Novosibirsk, Aug. 26-28, 1986. Summaries. [1986, 165p., rus] 41-2456

- Snow accumulation and melt during rainfall in forest land, Oregon. Berris, S.N., et al. [1987, p.135-142, eng] 41-2465

- Snow distribution patterns in clearings and adjacent forest. Golding, D.L., et al. [1986, p.1931-1940, eng] 41-2466

- Winter migration of soil water in the Devitsa River basin. Medvedev, M.I.U., et al. [1985, p.90-104, rus] 41-2731

- Changes in spring-flood runoff induced by forest swamp drainage. Pakutin, A.V., [1987, p.67-70, rus] 41-3082

- Modelling the areal depletion of a snowcover in a forested catchment. Buttle, J.M., et al. [1987, p.43-60, eng] 41-3405

- Forest-tundra and north taiga forests of the Far East. Raevskikh, V.M., et al. [1986, p.18-20, rus] 41-3744

- Thermal regime of upper soil layers in the Kolyma Basin. Alifimov, A.V., [1985, p.9-29, rus] 41-4119

- Winter roads in the Arkhangel'sk forests. Iakovenko, I.U.G., [1987, p.40-45, rus] 41-4172

- Forest hydrology and watershed management. Swanson, R.H., ed. [1987, 625p., eng] 41-4313

- Dynamics and mass balance of ions in meltwater and runoff in boreal forest. Jones, H.G., et al. [1987, p.19-31, eng] 41-4314

- Sources of acidity during snowmelt at a forested site in the west-central Adirondack Mountains, New York. Peters, N.E., et al. [1987, p.99-108, eng] 41-4315

- Effects of forests on wetland runoff during spring. Woo, M.-K., et al. [1987, p.297-307, eng] 41-4319

- Cryosphere and the zonality of soil melioration processes. Mel'nikov, P.I., et al. [1986, p.94-98, rus] 41-4468

- Influence of industrial wastes on vegetation of northern forest ecosystems. Egorova, V.N., et al. [1987, p.143-147, rus] 41-4570

**Forest lines**

- Estimating the productivity of northern taiga forests in Siberia. Mitrofanov, D.P., [1984, p.95-102, rus] 41-1082

- White spruce in the Brooks Range, Alaska. Cooper, D.J., [1986, p.247-252, eng] 41-1868

- Reconstruction of Little Ice Age events in the Canadian Rocky Mountains. Luckman, B.H., [1986, p.17-28, eng] 41-2703

- Snow distribution patterns in the alpine krummholz zone. Daly, C., [1984, p.157-175, eng] 41-3139

- Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., [1986, p.62-63, rus] 41-3541

**Forest soils**

- Biogeochemical exploration for mineral deposits in forest lands and taiga. Kovalevskii, A.L., [1986, p.32-37, rus] 41-199

- Dynamics and hydrophysical properties of forest litter in the Krasnoyarsk forest steppes. Stakanov, V.D., et al. [1986, p.172-176, rus] 41-816

- Development of soil algae in felled areas of northern taiga. Antipina, G.S., [1986, p.794-798, rus] 41-1084

- Productivity of forest phytocenoses. Elagin, I.N., ed. 1984, 149p., rusj 41-1078
- Climatic influence on trees in permafrost areas. Dashkovskaja, I.S., et al. 1984, p.49-56, rusj 41-1079
- Fire effect on Siberian forests. Evdokimenko, M.D., 1984, p.56-65, rusj 41-1080
- Influence of forestry and forest complexes on river runoff. Mishon, V.M., et al. 1986, p.71-75, rusj 41-1368
- Interrelations between forest and swamp in western Siberia. Glebov, F.Z., 1986, p.145-152, rusj 41-1405
- Lichen pine forests. Listov, A.A., 1986, 181p., rusj 41-2288
- Methods of forest interpretation on texture-selective images. Kravtsova, V.I., 1986, p.55-66, rusj 41-2304
- Structure of the basic spruce forest in southern taiga. Dylis, N.V., et al. 1986, p.6-22, rusj 41-2346
- Impact of wheeled vehicles on trees and soil cover during forest thinning in Karelia. D'jakonov, V.V., et al. 1986, p.137-146, rusj 41-2379
- Soil algae of pine forests and felled areas in Northern Karelia. Antipina, G.S., 1986, p.182-189, rusj 41-2380
- Artificial coenosis as a plant protection method. Lubiagina, N.P., 1986, p.88-90, rusj 41-2459
- Freezing technique for sampling skeletal, structureless forest soils. Froehlich, H.A., et al. 1986, p.1640-1642, engj 41-2693
- Structural-functional interrelationships and productivity of phytocenoses. Buzynkin, A.I., ed. 1983, 140p., rusj 41-2746
- Estimating the productivity of stands in the lower Angara River area. Atkin, A.S., 1983, p.47-52, rusj 41-2747
- Radial growth of conifers in different Angara River forest areas. Dashkovskaja, I.S., 1983, p.82-94, rusj 41-2748
- Mechanisms of birch adaptation to conditions of the North. Ermakov, V.I., 1986, 144p., rusj 41-2751
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilimbaev experimental forest taken as an example). Zubareva, R.S., ed. 1986, 158p., rusj 41-2873
- Characteristics of forest resources and their use in the Bilimbaev experimental and model forest. Smolnogov, E.P., et al. 1986, p.3-15, rusj 41-2874
- Soil cover of the Bilimbaev model forest. Firsova, V.P., et al. 1986, p.45-72, rusj 41-2875
- Classification of the lichen and green-moss pine forests of the northwestern European USSR. Sambuk, S.G., 1986, p.1468-1479, rusj 41-3023
- Pale yellow soils of the central Siberian Plateau. Sokolov, I.A., 1986, p.25-38, rusj 41-3083
- Mapping permafrost in the boreal forest. Morrissey, L.A., et al. 1986, p.1513-1520, engj 41-3472
- Using satellites in mapping West Siberian forests. Gorozhankina, S.M., et al. 1986, p.34-43, rusj 41-3515
- Freezing and thawing of drained peat soils in mountain forests. Chindiev, A.S., 1987, p.60-64, rusj 41-3737
- Forest-tundra and north taiga forests of the Far East. Raevskikh, V.M., et al. 1986, p.18-20, rusj 41-3744
- Revegetation of West Siberian forests. Vorob'ev, V.N., ed. 1985, 103p., rusj 41-3979
- Revegetation of cleared areas in pine forests of southern Priob'e under conditions of increased human activities. Bekh, I.A., 1985, p.4-11, rusj 41-3980
- Biologic activity of forest soils. Korsunov, V.M., ed. 1985, 122p., rusj 41-4109
- Biologic activities in forest soils of the Angara-Yenisey region. Sorokin, N.D., et al. 1985, p.35-47, rusj 41-4110
- Biologic activities in deeply freezing taiga soils. Popova, E.P., 1985, p.47-54, rusj 41-4111
- Microflora in forest soils of the Lower Angara depression. Vishniakova, Z.V., et al. 1985, p.88-101, rusj 41-4112
- Snow cover formation in pine, spruce and black alder forests. Blintsov, I.K., et al. 1987, p.15-18, rusj 41-4171
- Problems of origin and geography of soils. Liverovskij, I.U.A., 1987, 248p., rusj 41-4555
- Current problems in humus formation. Archegova, I.B., ed. 1986, 172p., rusj 41-4563
- Micromorphological characteristics of humus profile in loamy taiga soils. Rusanova, G.V., 1986, p.69-77, rusj 41-4564
- Humus profiles in the paludified loamy podzols of taiga. Viturin, G.M., 1986, p.78-88, rusj 41-4565
- Bioindications of natural environments in the North. Kruchkov, V.V., 1987, p.60-67, rusj 41-4568
- Forest strips**
- Preservation of protective forest vegetation. Pod'iahev, G.P., 1986, p.15, rusj 41-514
- Influence of forestry and forest complexes on river runoff. Mishon, V.M., et al. 1986, p.71-75, rusj 41-1368
- Structural basis of snow-retention efficiency of forest strips. Kolomiets, V.A., 1986, p.94-97, rusj 41-3261
- Snow cover characteristics in agricultural fields. Kaluzhnyy, I.L., et al. 1986, p.22-37, rusj 41-3585
- Grass-shrub vegetation developing on Arctic sand dunes. Sergienko, V.G., 1987, p.208-215, rusj 41-3610
- Snow cover distribution in a system of young poplar strips. Zarudnyy, I.A.K., 1987, p.45-46, rusj 41-3745
- Revegetation of West Siberian forests. Vorob'ev, V.N., ed. 1985, 103p., rusj 41-3979
- Protective forest strips in cold dry steppes. Lamin, L.A., 1985, p.79-87, rusj 41-3981
- Forest harvest, snowmelt and streamflow in the central Sierra Nevada. MacDonald, L.H., 1987, p.273-283, engj 41-4317
- Snow redistribution: strip cuts at Yuba Pass, California. McGurk, B.J., et al. 1987, p.285-295, engj 41-4318
- Development of landslide processes in the lower Ob' River valley. Okhalin, S.N., et al. 1986, p.106-116, rusj 41-4574
- See also:* Protective vegetation
- Forest trees**
- See:* Trees (plants)
- Forest tundra**
- Peculiarities of weathering and soil formation in forest tundra of the Northern Ob' Region. Liverovskaja, I.T., et al. 1986, p.58-63, rusj 41-1164
- Southern tundras in the system of zonal subdivision. Chernov, I.U.I., et al. 1986, p.192-204, rusj 41-1341
- Landscape indication methods of interpretation used in forest tundra surveys. Kiuntsel', V.V., 1986, p.118-121, rusj 41-1539
- Salt transfer processes in cryogenic soils. Panin, P.S., et al. 1986, p.245-250, rusj 41-1745
- Problems of physical geography and geobotanics. Selected works. Sochava, V.B., 1986, 343p., rusj 41-2753
- Brio-lichenologic investigations in the USSR. Shliakov, R.N., ed. 1986, 118p., rusj 41-2775
- Lichens in western Chukot highlands (Paliavaam River). Makarova, I.I., 1986, p.105-108, rusj 41-2778
- Variabilities in engineering-geological conditions in NW Siberia. Goral'chuk, M.I., et al. 1986, p.41-46, rusj 41-2817
- Development of Holocene peat hummocks in northwestern Siberia. Vasil'chuk, I.U.K., et al. 1986, p.123-128, rusj 41-2828
- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed. 1986, 81p., rusj 41-2916
- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al. 1986, p.36-41, rusj 41-2918
- Changes in ecosystems of the North due to economic development. Kruchkov, V.V., 1985, p.76-83, rusj 41-3438
- Problems of geocryological mapping. Grave, N.A., ed. 1986, 172p., rusj 41-3481
- Compilation of a regional geocryological forecast based on small-scale maps of natural complexes in the cryolithozone of western Siberia. Kritsuk, L.N., et al. 1986, p.53-67, rusj 41-3486
- All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports. Sokolov, V.E., ed. 1986, 154p., rusj 41-3539
- Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., 1986, p.62-63, rusj 41-3541
- Forest-tundra and north taiga forests of the Far East. Raevskikh, V.M., et al. 1986, p.18-20, rusj 41-3744
- Regional investigations of thermal erosion. Voskresenskij, K.S., et al. 1986, p.61-63, rusj 41-4064
- Changes induced by industrial activities in the Upper Kolyma basin. Grigor'eva, N.N., et al. 1986, p.9-13, rusj 41-4467
- Studies of migration frost mounds with the use of multiband aerial photographs. Gromova, E.I., 1983, p.142-150, rusj 41-4612
- Possibilities of the landscape-indication method for engineering-geological studies of northern West Siberia. Bondarik, G.K., et al. 1987, p.15-29, rusj 41-4621
- Forestry**
- Economic and ecological effects of forestry in northern regions. Fokina, N.M., et al. 1985, p.33-38, rusj 41-207
- Arctic science conference, 1986. 1986, 55p., engj 41-830
- Forestry in permafrost regions. Pozdniakov, L.K., 1986, 192p., rusj 41-1343
- Influence of forestry and forest complexes on river runoff. Mishon, V.M., et al. 1986, p.71-75, rusj 41-1368
- Fir trees. Krylov, G.V., et al. 1986, 238p., rusj 41-2259
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed. 1986, 198p., rusj 41-2373
- Dynamics of plant communities following the felling of forest. Ziabchenko, S.S., 1986, p.5-22, rusj 41-2374
- Soil restoration in felled areas of billberry pine forests. Voronova, T.G., 1986, p.22-31, rusj 41-2375
- Clear-felling impact on properties of sandy podzols in northern Karelia. Lazareva, I.P., et al. 1986, p.61-79, rusj 41-2376
- Changes in soil microflora induced by lumbering equipment in clear-cut areas. Zagural'skaja, L.M., 1986, p.79-91, rusj 41-2377
- Decomposition of wood litter on felled areas of the North. Kozlovskaja, L.S., et al. 1986, p.92-107, rusj 41-2378
- Soil algae of pine forests and felled areas in Northern Karelia. Antipina, G.S., 1986, p.182-189, rusj 41-2380
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilimbaev experimental forest taken as an example). Zubareva, R.S., ed. 1986, 158p., rusj 41-2873
- Characteristics of forest resources and their use in the Bilimbaev experimental and model forest. Smolnogov, E.P., et al. 1986, p.3-15, rusj 41-2874
- Gradual and selective cutting methods in the Bilimbaev taiga. Daniluk, V.N., et al. 1986, p.89-97, rusj 41-2877
- Artificial reforestation in the Bilimbaev taiga. Makarov, V.A., 1986, p.98-109, rusj 41-2878
- Natural revegetation of subpolar mountain areas affected by industry. Martynenko, V.A., 1986, p.1663-1668, rusj 41-3026
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed. 1985, 113p., rusj 41-3433
- Combined use of vegetational resources in the north European USSR. Chertovskoi, V.G., 1985, p.26-31, rusj 41-3434
- Remote sensing techniques of studying taiga after forest fires. Furiaev, V.V., 1986, p.147-159, rusj 41-3971
- Revegetation of cleared areas in pine forests of southern Priob'e under conditions of increased human activities. Bekh, I.A., 1985, p.4-11, rusj 41-3980
- Forest harvest, snowmelt and streamflow in the central Sierra Nevada. MacDonald, L.H., 1987, p.273-283, engj 41-4317
- Pollution impact on the environmental functions of northern taiga. Chertovskoi, V.G., 1987, p.67-72, rusj 41-4569
- Formwork (construction)**
- Winter concreting using heated formwork. Belvel', A.S., et al. 1986, p.28-29, rusj 41-1535
- Concrete lining of tunnels. Belkin, M.N., et al. 1987, p.63-67, rusj 41-3809
- Fortifications**
- Winter field fortifications. Farrell, D., 1986, 50p., engj 41-3817
- Fossil ice**
- Paleogeological investigations of fossil ground ice in permafrost. Kaplanskaja, F.A., et al. 1986, p.65-72, rusj 41-107
- Geologic conditions of the burial of Pleistocene glacier ice in the Yenisey River area. Astakhov, V.I., 1986, p.72-78, rusj 41-108
- Buried glacier ice and related lithomorphogenetic problems. Karukiapp, R.I.A., 1986, p.78-83, rusj 41-109
- Radar sounding of fossil ice within the Kurnosouke snow patch, Japan. Yamamoto, K., et al. 1987, p.218-220, engj 41-4462
- Fossils**
- Definition of fossil periglacial zones and periglacial phenomena. Brochu, M., 1986, p.27-30, frej 41-3578
- Foundations**
- Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985). Sal'nikov, P.I., ed. 1985, 119p., rusj 41-276
- Experience and prospects for using seasonally freezing grounds as foundations. Orlov, V.O., et al. 1985, p.3-11, rusj 41-277
- Allowing for frost-effect on soils in foundation design. Sal'nikov, P.I., 1985, p.11-13, rusj 41-278
- Formula for calculating frost-heave effect on pyramidal piles. Sazhin, V.S., et al. 1985, p.13-15, rusj 41-279
- Shallow building foundations on discontinuous permafrost. Fedorov, V.I., et al. 1985, p.15-16, rusj 41-280
- Rational use of shallow foundations on frost-heaving ground. Orlov, V.O., et al. 1985, p.16-17, rusj 41-281
- Foundationless low-rise buildings for structurally unstable ground. Abramov, V.E., 1985, p.18-19, rusj 41-282
- Pile foundations for buildings on deep freezing ground. Moiseichik, E.K., 1985, p.22-23, rusj 41-284
- Cast-in-situ drilled piles in frost heaving ground. Sal'nikov, P.I., et al. 1985, p.23-25, rusj 41-285
- Safety measures for operating buildings erected on Chita permafrost. Orlov, V.O., et al. 1985, p.25-26, rusj 41-286
- Operation of outdoor distribution systems in Chita City under frost heave conditions. Zhelezniak, I.I., et al. 1985, p.26-28, rusj 41-287
- Estimating the deformation of low-loaded structures in the BAM zone. Sobin, G.P., 1985, p.28-30, rusj 41-288
- Construction of low-rise buildings on seasonally freezing gravelly grounds. Polishchuk, A.I., et al. 1985, p.30-32, rusj 41-289

## Foundations (cont.)

- Stresses on low-rise buildings on frost heaving ground. Abzhailimov, R.Sh., [1985, p.32-34, rus] 41-290
- Unification principles in building design for sagging soils. Shevelev, V.B., et al, [1985, p.34-36, rus] 41-291
- One-story residential buildings with monolithic foundation plates built on weak fills and frost-heaving ground. Grigor'ev, P.I.A., [1985, p.37-39, rus] 41-292
- Designing foundations for different ground conditions. Trofimovich, N.V., [1985, p.39-41, rus] 41-293
- Foundation construction in complex engineering-geological conditions in Finland. Kushnir, I.N., et al, [1985, p.42-43, rus] 41-295
- Protection of shallow foundations from flooding. Kozlova, M.P., [1985, p.43-45, rus] 41-296
- Designing low-rise, shallow foundation buildings for frost heave. Setova, N.B., [1985, p.45-46, rus] 41-297
- Foundations for low-rise buildings on frost-heaving ground. Zhelezniak, I.I., [1985, p.47, rus] 41-298
- Piles made of steel-fiber-concrete. Tupitsyna, V.N., [1985, p.48-49, rus] 41-299
- Hydrophobic coatings for diminishing concrete deterioration and frost-heave effects. Iarkin, I.G., et al, [1985, p.49-51, rus] 41-300
- Formula for calculating foundation stability and tangential frost heave forces. Elgin, B.B., [1985, p.52-53, rus] 41-301
- Stresses and strains originating in structures near cracks. Terekhova, T.A., [1985, p.55-57, rus] 41-303
- Interaction of shallow foundations with underlying seasonally freezing layers. Fursov, V.V., [1985, p.57-59, rus] 41-304
- Designing low-load foundations of rural buildings in Transbaikalia. Makarov, A.P., et al, [1985, p.59-61, rus] 41-305
- Pile-foundation supports of power lines in the southern Far East. Tiurin, I.M., [1985, p.63-64, rus] 41-307
- Development of cryogenic processes in the central Transbaikalia. Shesternev, D.M., et al, [1985, p.74-76, rus] 41-311
- Estimating the frost heave of clays according to swelling. Orlov, V.O., et al, [1985, p.76-78, rus] 41-312
- Influence of suprapermafrost ground waters on the active layer. Pichuev, V.V., [1985, p.86-87, rus] 41-317
- Compaction of elastic-clayey grounds below building foundations on fills. Aminova, L.I., [1985, p.87-89, rus] 41-318
- Development of frost heave deformations in freezing, coarsely elastic ground. Petrova, M.A., et al, [1985, p.89-91, rus] 41-319
- Formulas for calculating settlement of seasonally freezing ground. Pyshechev, N.F., [1985, p.91-93, rus] 41-320
- Calculating tangential frost-heaving forces of ground. Saffronov, I.U.V., et al, [1985, p.93-95, rus] 41-321
- Deep seasonal freezing of ground in the southern Far East. Bykova, V.I., [1985, p.95-97, rus] 41-322
- Increasing the accuracy of determining deformative characteristics of thawing ground. Mareninov, I.A., [1985, p.97-99, rus] 41-323
- Measuring instruments IPG-3 and IDMG-1 for frost heaving of ground. Lapshin, V.I.A., et al, [1985, p.105, rus] 41-327
- Field methods of estimating frost heave properties of grounds. Chechel', M.V., et al, [1985, p.108-110, rus] 41-329
- Floor surface temperature in residential buildings on slab foundations. Rudykh, O.L., et al, [1985, p.113-114, rus] 41-333
- Stability of gravity platform foundation. Hoddinott, T., et al, [1986, p.127-135, eng] 41-358
- Antenna towers and antenna-supporting structures. [1981, 65p., eng] 41-493
- Modeling of marine fiber reinforced concrete and frozen soil. Reddy, D.V., et al, [1985, p.845-856, eng] 41-670
- Construction of foundations of low-rise buildings and structures on sagging ground. Koroteev, D.V., [1986, 155p. (pertinent p. 80-135), rus] 41-784
- Building pile foundations in water-saturated silty clay grounds. Vorontsov, G.I., et al, [1986, p.8-10, rus] 41-878
- Field studies of mooring structures in the Far North. Kizim, A.G., [1986, p.82-85, rus] 41-904
- Substations 110/6-10 kv built in the Urengoy gas field area. Gafit, S.I.A., et al, [1986, p.6-7, rus] 41-910
- Railroad foundation freezing—hazard and prevention. Chao, Y., ed, [1984, 382p., chi] 41-982
- Engineering and geological investigations of saline soils. Bakenov, B.B., et al, [1986, 245p., rus] 41-996
- Deformation of snow and ice at German antarctic stations. Dörr, R., [1984, 124p., ger] 41-1272
- Studying hydraulic drive of drilling equipment at low temperatures. Makushkin, D.O., et al, [1978, p.63-68, rus] 41-1323
- All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings. [1985, 126p., rus] 41-1362
- Heat loss factors for insulated building foundations. Zarling, J.P., et al, [1986, p.465-483, eng] 41-1383
- Power plant construction on permafrost. Shtelman, A.Sh., [1986, p.8-12, rus] 41-1400
- Effect of frost heave on shallow foundations. Xu, B., [1986, p.249-252, chi] 41-1424
- Frost-heave forces acting on the foundation base. Xu, Z., [1986, p.255-260, chi] 41-1426
- Design for an insulated foundation of culvert and sluice. Yu, B., et al, [1986, p.261-266, chi] 41-1427
- Introduction of anti-heave bridge with anchor striped foundation. Huang, Z., [1986, p.267-270, chi] 41-1428
- Arch and hollow foundation for anti-heave. Zhong, Z., [1986, p.271-174, chi] 41-1429
- Pile driving assembly for frozen ground. Falvusovich, L.L., et al, [1986, p.10-11, rus] 41-1525
- Design of tall railroad embankments on weak bases. Vol'nov, M.V., et al, [1986, p.5-6, rus] 41-1530
- Subway construction under severe climatic conditions. Smirnov, S.A., et al, [1986, p.15-17, rus] 41-1532
- Improvement of structures, methods of design, and construction of railroad electrification, signalization and centralization block and communication systems. Shurygin, V.P., ed, [1985, p.121p., rus] 41-1541
- Heat transfer between concrete power line supports and permafrost. Tsukanov, N.A., et al, [1985, p.21-32, rus] 41-1543
- Modular construction of oil and gas industry objects. Manual. Batalin, I.U.P., ed, [1986, 576p., rus] 41-1746
- Calculating pile foundations for hydraulic structures. Levachev, S.N., et al, [1986, 133p., rus] 41-1747
- Depth of sinking power-line support foundations. Argunov, L.I., [1984, p.11-13, rus] 41-1831
- Hydrojet drilling technology for permafrost. Petrosian, L.R., et al, [1986, p.39-41, eng] 41-1849
- Testing bearing strength of piles in permafrost by static penetration. Trofimenkov, I.U.G., et al, [1986, p.58-63, eng] 41-1850
- Formulas for calculating deformation modulus of frozen ground. Slashchilin, O.A., [1986, p.8-9, rus] 41-1883
- Thermal melioration of ground by late-fall loosening. Stafeyev, P.F., [1986, p.4-5, rus] 41-1886
- Construction of electric power substations in permafrost regions. Khomutov, V.A., et al, [1986, p.22-23, rus] 41-1920
- Sagging of thawing clayey grounds of different consistency. Khrustalev, L.N., et al, [1986, p.169-172, rus] 41-2097
- Ultimate design of foundations for permafrost bases. Pustovolt, G.P., [1986, p.218-223, rus] 41-2104
- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., [1986, p.92-94, rus] 41-2161
- Marine ice foundations for drilling rigs fixed at the bottom. Bogorodskii, V.V., et al, [1986, p.162-166, rus] 41-2171
- Structural heat-engineering for road pavements. Mikhaïlov, A.V., et al, [1986, 149p., rus] 41-2210
- Concrete island under ice loading. Templeton, J.S., III, et al, [1987, p.33-40, eng] 41-2399
- Studying heat and mass transfer in frozen ground under thermophiles. Nesterov, I.I., et al, [1986, p.1127-1130, rus] 41-2537
- Drilling complex BTSE-600 for rocks and frozen ground. Bryzhko, S.A., et al, [1986, p.41, rus] 41-2790
- Bridge piers without grillage under complicated natural conditions. Kudriashov, V.I., et al, [1987, p.16-17, rus] 41-2793
- Structures of foundations designed for perennially frozen strongly deformable grounds. Kogodovskii, O.A., et al, [1986, p.29-32, rus] 41-2797
- Design and construction of the socle part of the Kureyskaya channel dam. Makarov, V.A., et al, [1986, p.27-31, rus] 41-2866
- Concrete work at the Kureyskaya power plant site. Bukhman, V.I., [1986, p.50-54, rus] 41-2869
- Construction of structures and foundations by the grout curtain method. Smorodinov, M.I., et al, [1986, 216p., rus] 41-2886
- Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p., rus] 41-2911
- More precise definition of computed permafrost temperatures in beds of buildings and structures. Fedorovich, D.I., et al, [1986, p.188-192, eng] 41-2945
- Failure of frozen soils by high-pressure hydraulic jets in trench and pit construction. Petrosian, L.R., et al, [1986, p.194-197, eng] 41-2946
- Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] 41-2962
- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Mat foundations for offshore structures in Arctic regions. Yokel, F.Y., et al, [1987, 146p., eng] 41-3029
- Construction of deep foundations. Glotov, N.M., et al, [1985, 248p., rus] 41-3125
- Geomechanical studies of power supply structure foundations. Sapegin, D.D., ed, [1985, 120p., rus] 41-3126
- Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant. Golli, O.R., [1985, p.52-56, rus] 41-3127
- Geotechnical design for an arctic mobile offshore drilling unit. Hewitt, K.J., et al, [1986, p.956-979, eng] 41-3170
- Unforgiving North. Chilli, R.W.C., et al, [1985, p.157-164, eng] 41-3191
- Revision of building codes for foundation construction on permafrost. Fedorovich, D.I., et al, [1987, p.144-146, eng] 41-3214
- Non-steady-state heat exchange of linear underground constructions with a thawing (freezing) soil. Gokhman, M.R., [1987, p.781-785, eng] 41-3241
- Forecasting ground temperature during adfreezing of piles. Pylaev, E.L., et al, [1987, p.73-75, rus] 41-3269
- Construction properties of gley clayey ground. Popov, A.F., [1986, p.16-22, rus] 41-3393
- Engineering geocryology in hydraulic construction. Bianov, G.F., ed, [1986, 205p., rus] 41-3439
- Temperature and moisture regime of the Vilyuy power plant dam. Olovin, B.A., [1986, p.151-161, rus] 41-3458
- Long river crossings of overhead power lines. Elenbogen, G.N., et al, [1987, p.2-9, rus] 41-3611
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, [1986, 328p., rus] 41-3664
- Concrete foundations on permafrost. Mangus, A.R., [1987, p.40-42, eng] 41-3783
- Engineering preparations for construction of the Surgut Power Plant. Lutsiuk, I.V., et al, [1987, p.14-17, rus] 41-3808
- Grouting in difficult soil and weather conditions. Sealy, C.O., et al, [1987, p.84-94, eng] 41-3888
- New types of foundations for snow bridges. Benussi, G., [1987, p.44-46, ita] 41-4104
- Foolproof sinking of piles into thawed and perennially frozen grounds. Novozhilov, G.F., [1987, 111p., rus] 41-4167
- Computation of maximum permafrost temperatures in beds beneath buildings. Kononov, A.A., [1986, p.192-197, eng] 41-4366
- Experience and prospects of using self-contained steam-liquid cooling devices in construction on permafrost. Khrustalev, L.N., et al, [1983, p.3-12, rus] 41-4471
- Controlling temperature regime of frozen massive rocks in northern construction. Makarov, V.I., [1983, p.13-29, rus] 41-4472
- Developing and standardizing methods of determining the structural properties of frozen grounds. Sadovskii, A.V., et al, [1983, p.19-21, rus] 41-4482
- See also: Permafrost bases
- Fracture zones**
- Ice fracturing induced by offshore operations. Romagnoli, R., et al, [1986, p.399-408, eng] 41-1109
- Model of stresses in the Antarctic lithosphere induced by ice loads. Shemenda, A.I., et al, [1986, p.97-102, rus] 41-1166
- Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al, [1986, p.29-33, rus] 41-3767
- Fracturing**
- Microstructure and the resistance of rock to tensile fracture. Peck, L., et al, [1985, p.11533-11546, eng] 41-496
- Model for rock fracture during freezing at Signy Island. Hall, K., [1986, p.53-60, eng] 41-801
- Causes of fractured freeze pipes in the Hünxe shaft and their restoration. Wollers, K., [1985, p.1428-1433, eng] 41-856
- Ice fracture mechanics and some of its applications. Goldstein, R.V., et al, [1986, p.197-210, eng] 41-1096
- Determining the resistance of fresh water ice to fracturing. Danilenko, V.I., [1985, p.135-140, rus] 41-1575
- Scaling in ice fracture mechanics. Atkins, A.G., [1986, p.67-73, eng] 41-1583
- Fracture toughness of freshwater ice as a function of loading rate. Nixon, W.A., et al, [1986, p.287-296, eng] 41-1599
- Ice load prediction during indentation. Shyam Sunder, S., [1986, p.297-309, eng] 41-1600
- Fracture toughness of ice over a range of grain sizes. Nixon, W.A., et al, [1985, 10p. + figs., eng] 41-1680
- Fracture toughness of single crystal ice and columnar grained ice. Kusumoto, S., et al, [1985, p.19-27, jpn] 41-2186
- Fracture toughness and macrofractography of single crystal ice. Uchida, T., et al, [1986, p.107-112, jpn] 41-2187
- Tensile fracture model for ice. Sunder, S.S., et al, [1987, p.225-233, eng] 41-2425
- Development of frost fracture systems in massive frozen ground. Gevorkian, S.G., [1986, p.78-82, rus] 41-2823
- Calculating frost resistance of structural elements. Kuz'min, V.R., [1985, p.95-102, rus] 41-2852
- Determination of crack resistance of freshwater ice. Danilenko, V.I., [1985, p.131-136, eng] 41-2972



- Law observed in the generation of sound in ice samples subjected to loading. Mitiaev, P.V., et al, 1986, p.168-169, rusj 41-3240
- Effect of grain size on the internal fracturing of polycrystalline ice. Cole, D.M., 1986, 71p., engj 41-3479
- Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al, 1986, p.29-33, rusj 41-3767
- Rock failure under thermo-cyclic loads. Moskalev, A.N., et al, 1987, 248p., rusj 41-4152
- Fram Strait**
- Ice transport through the Fram Strait. Vinje, T., et al, 1986, 39p., engj 41-1574
- Ice-edge eddies in the Fram Strait marginal ice zone. Johannessen, O.M., et al, 1987, p.427-429, engj 41-2802
- Remote sensing of the Fram Strait marginal ice zone. Shuchman, R.A., et al, 1987, p.429-431, engj 41-2803
- Mesoscale oceanographic processes beneath the ice of Fram Strait. Manley, T.O., et al, 1987, p.432-434, engj 41-2804
- Ocean dynamics and acoustic fluctuations in the Fram Strait marginal ice zone. Dyer, I., et al, 1987, p.435-436, engj 41-2805
- Physical properties of sea ice discharged from Fram Strait. Gow, A.J., et al, 1987, p.436-439, engj 41-2806
- Crystal structure of Fram Strait sea ice. Gow, A.J., et al, 1986, p.20-29, engj 41-3056
- Effect of sub-ice mesoscale features within the marginal ice zone of Fram Strait. Manley, T.O., 1987, p.3944-3960, engj 41-3063
- West Spitsbergen current and adjacent waters in Fram Strait. Weigel, A.M., 1987, 98p., engj 41-3306
- Winter marginal ice zone experiment, Fram Strait/Greenland Sea, 1987/89. Davidson, K., ed, 1986, 53p., engj 41-3930
- Summer marginal ice zone experiments in the Fram Strait and Greenland Sea. Johannessen, O.M., 1987, p.6716-6718, engj 41-4231
- Large-scale oceanography in Fram Strait during the 1984 Marginal Ice Zone Experiment. Quadfasel, D., et al, 1987, p.6719-6728, engj 41-4232
- Current regimes across the East Greenland polar front, summer 1984. Manley, T.O., et al, 1987, p.6741-6753, engj 41-4234
- Eddies in the Fram Strait marginal ice zone, 1983 and 1984. Johannessen, J.A., et al, 1987, p.6754-6772, engj 41-4235
- Biomass in the marginal ice zone of the Fram Strait, summer 1984. Smith, W.O., Jr., et al, 1987, p.6777-6786, engj 41-4237
- Physical properties of summer sea ice in the Fram Strait. Tucker, W.B., et al, 1987, p.6787-6803, engj 41-4238
- Sea ice morphology in the Fram Strait and Greenland Sea from remote sensing data. Campbell, W.J., et al, 1987, p.6805-6824, engj 41-4239
- Ice concentration in the marginal ice zone, Fram Strait. Burns, B.A., et al, 1987, p.6843-6856, engj 41-4242
- Observation of the planetary boundary layer in the marginal ice zone. Kellner, G., et al, 1987, p.6955-6965, engj 41-4251
- Mass balance of the Arctic Ocean. Rudels, B., 1987, 53p., engj 41-4599
- France**
- Current problems on avalanche research in France, Japan and Austria. Kronfelner-Kraus, G., 1984, p.151-154, gerj 41-710
- Avalanche balance in France, Oct. 1, 1984-Sep. 30, 1985. Pahaut, E., 1985, p.3-16, frej 41-860
- Levels of services in winter road maintenance. Charpentier, G., et al, 1986, p.30-33, itaj 41-866
- Alps**
- Runoff from rock glaciers in the southern Alps of France. Evin, M., 1984, p.27-40, frej 41-623
- Avalanche data, 1985-1986 season. David, P., et al, 1986, p.3-16, frej 41-3356
- Wind studies center in the Croix de Chamrousse (Isère) mountain environment. Perroud, P., et al, 1986, p.51-54, frej 41-3357
- Devès**
- Pingo scars in Devès, Haute-Loire, France. Bout, P., 1986, p.17-26, frej 41-3577
- Mont Blanc**
- Glacial and climatic fluctuations during the last century in the Mont Blanc and Monte Rosa groups. Cerutti, A.V., 1985, p.124-136, itaj 41-3180
- Ice cave on Mont Blanc, France, 1986. Reynaud, L., 1987, p.130-131, engj 41-3606
- Mont Rose**
- Glacial and climatic fluctuations during the last century in the Mont Blanc and Monte Rosa groups. Cerutti, A.V., 1985, p.124-136, itaj 41-3180
- Pyrenees**
- Avalanche on Mont Canigou, Pyrenees, 1986. Agüera, J.M., et al, 1986, p.13-24, frej 41-870
- Seine**
- Sand-gravel pockets in the lower Seine valley: a status report. Chancerel, A., 1986, p.83-104, frej 41-852
- Frazil ice**
- Final report on freezeup studies, RU 205. 1986, var.p., engj 41-1208
- Flume studies and field observations of the interaction of frazil ice and anchor ice with sediment. Kempema, E.W., et al, 1986, 48p., engj 41-1210
- St. Lawrence River hanging ice dams, winter 1983-1984. Shen, H.T., et al, 1984, 85p., engj 41-1669
- Measurement of water temperature during frazil ice formation. Williams, G.P., 1984, 7p., engj 41-3239
- Development of a frazil ice sampler. Brockett, B.E., et al, 1986, 12p., engj 41-3257
- Frazil measured in the laboratory and in the field. Tsang, G., 1986, p.115-128, engj 41-4515
- Freeze drying**
- Yellow spots on the ice of Lake Mälaren. Hjort, J., et al, 1982, p.226-230, swej 41-2857
- Sublimation of a frozen semi-infinite porous medium. Fey, Y.C., et al, 1987, p.771-779, engj 41-3943
- Freeze thaw cycles**
- Unification principles in building design for sagging soils. Shevelev, V.B., et al, 1985, p.34-36, rusj 41-291
- Corrosion of offshore reinforced concrete structures. Jensen, F.O., 1986, p.405-413, engj 41-360
- Problem of the resistance of concrete surfaces to salting. Stehno, G., 1985, p.59-63, gerj 41-391
- Sludge dewatering at sewage treatment plants in Finland. Puolanne, J., 1981, p.107-117, engj 41-392
- Freezing of liquid-saturated porous media. Weaver, J.A., et al, 1986, p.654-659, engj 41-396
- Concrete frost resistance in areas of variable water levels. Kargin, G.M., 1985, p.44-49, rusj 41-418
- Cold set concrete. Beach, W.G., 1986, 12p. + 53 figs., engj 41-523
- Effects of freeze thaw cycles on granular soils for pavements. Cole, D., et al, 1986, 70p., engj 41-593
- Impulse method of describing non-equilibrium cryogenic physical-geological processes. Koval'kov, V.P., 1986, p.101-115, rusj 41-603
- Research on transportation facilities in cold regions. Andersland, O.B., ed, 1986, 105p., engj 41-639
- Assessment of freeze-thaw damage in cement stabilised soils. Kettle, R.J., 1986, p.16-31, engj 41-641
- Structural monitoring concepts for arctic pipelines. Nymann, K.J., et al, 1986, p.47-66, engj 41-643
- Fatigue and freeze-thaw resistance of epoxy mortar. Biswas, M., et al, 1985, p.33-37, engj 41-647
- Enthalpy methods used in the solution of Stefan problems. Voller, V.R., et al, 1985, p.245-275, engj 41-658
- Engineering surveys along the Trans-Alaska Pipeline. Godfrey, R.N., et al, 1986, 85p., engj 41-799
- Building construction in cold climates. Minion, R., comp, 1985, 79p., engj 41-824
- Freeze-thawing and dewatering plant for sewage sludges. Honda, T., et al, 1981, p.599-604, engj 41-873
- Durability of lightweight concrete for arctic concrete structures. Nojiri, Y., et al, 1985, p.431-438, engj 41-889
- Behavior of lightweight concretes at cryogenic temperatures. Berner, D.E., et al, 1985, p.439-445, engj 41-890
- Understanding the Arctic sea floor for engineering. 1982, 141p., engj 41-893
- Shear strength loss of a silty sand subjected to frost action. Gifford, G.P., 1984, 296p., engj 41-901
- Permafrost environment. Harris, S.A., 1986, 276p., engj 41-955
- Railroad foundation freezing—hazard and prevention. Chao, Y., ed, 1984, 382p., chij 41-982
- Effect of asphalt concrete overlays on cracking in cement concrete. Janssen, D.J., 1985, 186p., engj 41-986
- Cement science. Ramchandran, V.S., et al, 1984, p.1-53, engj 41-1031
- Seasonal variations of nitrogen in soils, Alberta. Malhi, S.S., et al, 1986, p.397-409, engj 41-1085
- Fly ash, silica fume, slag, and natural pozzolans in concrete; Proceedings. 1986, 1609p. (2 vols.), engj 41-1152
- Effects of air entrainment and freeze-thaw cycles on concrete strength. Paillere, A.M., et al, 1986, p.541-562, engj 41-1153
- Freeze thaw resistance of silica-fume concrete. Malhotra, V.M., 1986, p.1069-1094, engj 41-1155
- Strength and freezing-and-thawing resistance of concrete incorporating condensed silica fume. Yamato, T., et al, 1986, p.1095-1117, engj 41-1156
- Physical basis of frost weathering. Walder, J.S., et al, 1986, p.27-32, engj 41-1185
- Methods of studying cryogenic relief-forming processes at research stations. Zhigarev, L.A., et al, 1986, p.111-119, rusj 41-1199
- Effect of humidity and temperature on rocks in cold climates. Fahey, B.D., et al, 1984, p.291-298, engj 41-1231
- Rock moisture content and frost weathering. McGreevy, J.P., et al, 1985, p.337-346, engj 41-1252
- Device for monitoring soil movement in peatlands. Nelson, F.E., 1986, p.275-281, engj 41-1258
- Thermal expansion of asphalt pavement at low temperature. Osterkamp, T.E., et al, 1986, p.299-301, engj 41-1298
- Swamp stability equations for taiga. Geleta, I.F., 1986, p.49-57, rusj 41-1366
- Frost crack of buildings and its treatment methods in cold regions. Tang, S., 1986, p.275-280, chij 41-1430
- Effect of freeze/thaw on gaseous nitrogen loss from upland soils. Edwards, A.C., et al, 1986, p.86-91, engj 41-1441
- High strength concrete control. Sehgal, P., et al, 1986, p.32-34, engj 41-1468
- High frost resistance of concrete objects impregnated with polymer solutions. Belov, L.F., et al, 1985, p.41-50, rusj 41-1544
- Periglacial weathering of the mountain massifs, SW Spitsbergen. Martini, A., 1986, p.45-73, engj 41-1551
- Using stress transducers in predicting frost resistance of concrete. Ter-Gazarian, G.N., et al, 1985, p.85-88, rusj 41-1622
- Pine needles unable to survive rapid temperature changes. Rodionov, V.S., et al, 1985, p.934-939, rusj 41-1827
- Freeze thaw activity at snowpatch sites. Nyberg, R., 1986, p.207-211, engj 41-1879
- Polystyrene foam used in construction of road and airport pavements. Ivanov, V.N., 1986, p.14-16, rusj 41-1882
- Freeze-thaw of pore moisture in sandy rocks. Medvedskii, R.I., 1986, p.543-549, engj 41-1894
- In situ measurements of moisture and salt movement in freezing soils. Gray, D.M., et al, 1986, p.696-704, engj 41-1930
- Polymer modified concrete. Blaga, A., et al, 1985, 4p., engj 41-1940
- Microclimate of concrete walls. Hudec, P.P., et al, 1986, p.615-623, engj 41-1997
- Transverse deformation of loaded concrete at low temperature. Elices, M., et al, 1986, p.741-748, engj 41-1999
- Ice formation in hardened cement paste. Bager, D.H., et al, 1986, p.835-844, engj 41-2000
- Mathematical model of the freezing process of concrete. Olsen, M.P.J., 1984, p.113-122, engj 41-2002
- Cryogenic structure of active layer rocks in Yamal Peninsula. Ershov, E.D., et al, 1986, p.149-162, rusj 41-2095
- Sagging of thawing clayey grounds of different consistency. Khristalev, L.N., et al, 1986, p.169-172, rusj 41-2097
- Heat transfer characteristics of a latent heat storage unit. Sasaguchi, K., et al, 1986, p.2978-2992, engj 41-2110
- Frost effects in soils. Van Vliet-Lanoë, B., 1985, p.117-158, engj 41-2112
- Water freezing and ice melting in fine-grained rocks. Ershov, E.D., 1986, p.53-66, rusj 41-2540
- Deformation of pavements during freeze thaw cycles. Johnson, T.C., et al, 1986, 138p., engj 41-2549
- Elastic PVA hydrogel prepared by freezing-and-melting. Yokoyama, F., et al, 1986, p.595-601, engj 41-2574
- Resilient moduli of soil specimens in the frozen and thawed states. Johnson, T.C., et al, 1986, 62p., engj 41-2613
- Setting standards for water-resistance properties of road pavement materials for Siberian conditions. Shabanov, V.M., 1986, p.106-110, rusj 41-2758
- Concrete strength frost-tested after 4 years and after 28 days. Ianbykh, N.N., 1986, p.36-37, rusj 41-2789
- Regional regularities governing long-range freeze-thaw of ground. Kuznetsova, I.L., et al, 1986, p.176-183, rusj 41-2838
- Freezing around a buried pipe. Sadegh, A.M., et al, 1987, p.223-232, engj 41-2981
- Freezing of water and melting of ice in disperse rocks. Ershov, E.D., 1986, p.55-67, engj 41-3016
- Frost action on roads and airfields. Johnson, T.C., et al, 1986, 45p., engj 41-3143
- Service life of flexible elements subject to freeze-thaw cycles. Krakovskii, M.B., et al, 1986, p.19-20, rusj 41-3207
- Arctic landforms: the formative processes. Bird, J.B., 1987, p.75-79, engj 41-3234
- Non-steady-state heat exchange of linear underground constructions with a thawing (freezing) soil. Gokhman, M.R., 1987, p.781-785, engj 41-3241
- Eolian dunes in Victoria Land. Miotke, F.-D., 1985, p.79-125, gerj 41-3252
- Evaluation and prevention of water damage to asphalt pavement materials. 1985, 154p., engj 41-3332
- Evaluation of stripping problems in Oregon. Takalou, H., et al, 1985, p.22-48, engj 41-3333
- Changes in asphalt concrete durability due to freeze thaw cycles. Gilmore, D.W., et al, 1985, p.73-88, engj 41-3334
- Moisture damage to various foamed asphalt mixtures. Castedo, H., et al, 1985, p.104-115, engj 41-3335
- Heat transfer with phase change in ground-water flow. Kawatani, T., et al, 1985, p.206-217, engj 41-3340
- Simultaneous calculation of temperature and stresses in freezing-thawing ground. Ukhov, S.B., et al, 1986, p.96-106, rusj 41-3452
- Evaluating slope stability at different temperature regimes. Ukhov, S.B., et al, 1986, p.106-113, rusj 41-3453

**Freeze thaw cycles (cont.)**

- Modeling of processes in landscape-geochemical systems. Syuev, V.V., [1986, 301p., rus] **41-3512**
- Headwall weathering zones, Boundary Glacier, Canada. Gardner, J.S., [1987, p.60-67, eng] **41-3597**
- Concrete durability. [1987, 2179p. (2 vols.), eng] **41-3690**
- Importance of the surface layer for the durability of concrete structures. Meyer, A., [1987, p.49-61, eng] **41-3691**
- Classification of the deterioration of concrete based on mechanism. Popovics, S., [1987, p.131-142, eng] **41-3692**
- Durability of high-strength concrete. Whiting, D., [1987, p.169-186, eng] **41-3693**
- Evaluation of durability for concrete in terms of watertightness by "permeability coefficient test results". Tanahashi, I., et al., [1987, p.187-206, eng] **41-3694**
- Concrete durability: the interface between research and practice. O'Brien, T., et al., [1987, p.255-264, eng] **41-3695**
- Durability of concrete containing cement kiln dust. Ramakrishnan, V., et al., [1987, p.305-321, eng] **41-3696**
- Making more durable concrete with polymeric fibers. Vondran, G., [1987, p.377-396, eng] **41-3697**
- Durability considerations—precast concrete pipe. Bealey, M., [1987, p.493-508, eng] **41-3699**
- Destruction of concrete water tanks in a severe climate due to ice lensing. Rogers, C., et al., [1987, p.723-739, eng] **41-3703**
- Durability of concrete with a superplasticizing admixture. Dhir, R., et al., [1987, p.741-764, eng] **41-3704**
- Durability of high-strength concrete containing a high range water reducer. Robson, G., [1987, p.765-780, eng] **41-3705**
- Cracking due to frost action in Portland cement concrete pavements—a literature survey. Sawan, J., [1987, p.781-803, eng] **41-3706**
- Deterioration of concrete used in road bridges due to freezing and thawing. Fujiwara, T., [1987, p.805-818, eng] **41-3707**
- Durability of concrete containing fly ash for use in highway applications. Carrasquillo, P., [1987, p.843-861, eng] **41-3709**
- Freeze-thaw resistance of polymer modified concrete. Balaguru, P., et al., [1987, p.863-876, eng] **41-3710**
- Durability of concrete under arctic offshore conditions. Kivikk, L., et al., [1987, p.935-946, eng] **41-3714**
- Durability of fiber reinforced concrete in a severe marine environment. Hoff, G., [1987, p.997-1041, eng] **41-3717**
- Fly ash and concrete durability. Klieger, P., et al., [1987, p.1043-1069, eng] **41-3718**
- Durability of shotcrete. Schrader, E., et al., [1987, p.1071-1101, eng] **41-3719**
- Durability of concrete containing a shrinkage reducing admixture. Sugiyama, M., et al., [1987, p.1103-1119, eng] **41-3720**
- Evaluation and prediction of concrete durability—Ontario Hydro's experience. Sturup, V., et al., [1987, p.1121-1154, eng] **41-3721**
- Durability of concrete containing cement materials in sea water. Malhotra, V., et al., [1987, p.1227-1258, eng] **41-3725**
- Deterioration of aggregates—the underlying causes. Hudec, P., [1987, p.1325-1342, eng] **41-3729**
- Concrete deterioration associated with alkali-aggregate reactions. Fournier, B., et al., [1987, p.1343-1364, eng] **41-3730**
- Relationship of corrosion of reinforced concrete structures to marine environments. Bjegovic, D., [1987, p.1603-1609, eng] **41-3733**
- Freezing and thawing of drained peat soils in mountain forests. Chindiaev, A.S., [1987, p.60-64, rus] **41-3737**
- State-of-the-art report on offshore concrete structures for the Arctic. [1986, 117p., eng] **41-3787**
- Experimental studies on reducing methods of uplift force to a steel pipe. Fukuda, M., et al., [1986, p.109-120, jpn] **41-3884**
- Frost heave in permafrost. Mackay, J.R., et al., [1987, p.37-41, eng] **41-4008**
- Surface modifications for thawing of permafrost. Interim report. Esch, D.C., [1984, 15p., eng] **41-4074**
- Effects of freeze-thaw cycles on the microstructure of hydration products. Pigeon, M., et al., [1986, p.1-19, eng] **41-4141**
- Rigid surfaces for roads and airports. Glushkov, G.I., et al., [1987, 255p., rus] **41-4151**
- Rock failure under thermo-cyclic loads. Moskalov, A.N., et al., [1987, 248p., rus] **41-4152**
- Role of gas-liquid inclusions in cryogenic shattering of quartz. Rogov, V.V., [1987, p.81-85, rus] **41-4169**
- Exposure tests at Treat Island. Smith, R.J., [1987, p.48-53, eng] **41-4175**
- Effect of a freeze-thaw cycle on properties of microsome membranes from wheat. Borochov, A., et al., [1987, p.131-134, eng] **41-4177**
- New information on rock streams. Shvetsov, P.F., et al., [1983, p.103-105, rus] **41-4485**
- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., [1986, p.122-167, rus] **41-4502**
- Practical suggestions for calculating soil temperature regime (current awareness material). Fel'dman, G.M., [1985, 69p., rus] **41-4611**
- See also: Seasonal freeze thaw
- Freeze thaw tests**
- Freeze thaw simulations on quartz-micaschist on Signy Island. Hall, K., [1986, p.19-30, eng] **41-2359**
- Deformation properties of washed-up sands under permafrost conditions. Badanova, L.I., [1986, p.157-165, rus] **41-2835**
- Sludge freeze-thaw dewatering—an alternative for small wastewater treatment plants. Särner, E., [1982, p.164-180, swe] **41-2856**
- Freeze-thaw durability of concrete with and without silica fume. Pigeon, M., et al., [1986, p.76-85, eng] **41-2897**
- Freeze thaw tests of road and airfield subgrade soils. Cole, D.M., et al., [1987, 36p., eng] **41-2942**
- Damage mechanism of cyclic freezing-thawing in sulfur concrete. Cohen, M.D., [1987, p.357-360, eng] **41-3215**
- Freeze-thaw test to determine the frost susceptibility of soils. Chamberlain, E.J., [1987, 90p., eng] **41-3258**
- Prevention of water damage in asphalt mixtures. Kennedy, T.W., [1985, p.119-133, eng] **41-3336**
- Rapid one-cycle test for evaluating aggregate performance when exposed to freezing and thawing in concrete. Faulkner, T., et al., [1987, p.705-722, eng] **41-3702**
- Freezing and thawing resistance of concrete containing chloride. Yamato, T., et al., [1987, p.901-917, eng] **41-3712**
- Theoretical aspect and methods of testing concrete resistance to freezing and deicing chemicals. Bjegovic, D., et al., [1987, p.947-971, eng] **41-3715**
- Strength and durability of concretes made with type 10 cements used in Ontario. Northwood, R., et al., [1987, p.973-996, eng] **41-3716**
- Freeze thaw durability of concretes with fly ash and microsilica. Johnston, C., [1987, p.1183-1204, eng] **41-3723**
- Aggregate—the decisive element in the frost resistance of concrete. Teodoru, G., [1987, p.1297-1310, eng] **41-3727**
- Freeze thaw durability of limestone aggregates in concrete. Lane, D., et al., [1987, p.1311-1323, eng] **41-3728**
- Freezeup**
- Transient two-dimensional phase change. Albert, M.R., et al., [1985, p.229-243, eng] **41-657**
- Recommendations for site-specific observations of river ice. Prowse, T.D., [1985, p.111-125, eng] **41-1489**
- Forecasting the freezeup date of the Danube River. Shcherbak, A.V., [1986, p.155-160, rus] **41-2636**
- Ice regimes of the lower Mackenzie River and Mackenzie Delta. Terroux, A.C.D., et al., [1981, 64p. + append., eng] **41-2727**
- Ice thickness data, winter 1979-1980. [1987, 43p., eng] **41-3253**
- Prediction of freeze-up time, freezing and melting. Dilley, J.F., et al., [1986, p.1727-1732, eng] **41-3291**
- Ice thickness data for selected Canadian stations, 1972-1976 winters. [1976, 4 pieces, eng] **41-4595**
- Freezing**
- Freezing of liquid-saturated porous media. Weaver, J.A., et al., [1986, p.654-659, eng] **41-396**
- Thermodynamic theories of freezing and melting potentials. Rastogi, R.P., et al., [1986, p.179-185, eng] **41-530**
- Freezing of curved water pipes. Oiwake, S., et al., [1986, p.2151-2155, eng] **41-531**
- Heat conduction phase change problems. Albert, M.R., et al., [1986, p.591-607, eng] **41-607**
- Two-dimensional heat conduction phase change. Albert, M.R., et al., [1983, p.85-110, eng] **41-659**
- Optical cable properties under ice. Tanaka, M., et al., [1981, p.22(1)-22(4), eng] **41-661**
- Rapid and high pressure freezing techniques in cryobiology. Menco, B.P.M., [1986, p.177-240, eng] **41-1014**
- Freezing effect on seismic velocity in permafrost. Zimmerman, R.W., et al., [1986, p.1285-1290, eng] **41-1213**
- Self-diffusion coefficient at the solid-liquid interface. Bagchi, B., [1986, p.4667-4668, eng] **41-1440**
- Glass freezing as kinetics time scale singularity of new significance. Larsen, U., [1986, p.248-253, eng] **41-1621**
- Freezing tolerance of Douglas fir in the inland Northwest. Rehfeldt, G.E., [1986, 5p., eng] **41-2185**
- Freezing and higher plants. Grou, B.W.W., [1986, p.203-207, eng] **41-2224**
- Convective flows of cold water over a flat surface. J.Y., et al., [1987, p.85-89, eng] **41-2406**
- Neutron scattering of supercooled water in silica gels. Poinson, C., et al., [1986, p.3447-3459, eng] **41-2479**
- Modeling of solute processes during freezing in peat and overlying water. Li, X.-M., [1986, 119p., eng] **41-2639**
- Free boundary problems. Stojanovic, S.D., [1986, 93p., eng] **41-2642**
- Water effects on radiation induced microwave conductivity of frozen gels. Eden, J., et al., [1987, p.51-56, eng] **41-2807**
- Effects of freezing on nitrite stability in aqueous solutions. Muneta, P., et al., [1987, p.22-23, eng] **41-2808**
- Freezing and interfaces: density functional theories in two and three dimensions. Haymet, A.D.J., [1986, p.1-32, eng] **41-2810**
- Pulse radiolysis study of electrons in frozen alkaline solutions. Czerwik, Z., et al., [1986, p.275-283, eng] **41-2811**
- Sludge freeze-thaw dewatering—an alternative for small wastewater treatment plants. Särner, E., [1982, p.164-180, swe] **41-2856**
- Problems and opportunities with winter wastewater treatment. Reed, S.C., [1986, p.16-20, eng] **41-2965**
- Bounds for the freezing time and removed energy during solidification. Charach, C., et al., [1987, p.233-240, eng] **41-2982**
- Antifreeze glycoproteins from polar fish blood. Feeney, R.E., et al., [1986, p.59-78, eng] **41-3165**
- Heat transfer, 1986; proceedings. [1986, 6 vols. + 1 vol. of abstracts, eng] **41-3288**
- Prediction of freeze-up time, freezing and melting. Dilley, J.F., et al., [1986, p.1727-1732, eng] **41-3291**
- Laminar flow heat transfer in a tube with internal solidification. Toda, S., et al., [1986, p.1745-1750, eng] **41-3293**
- Outward phase change in a cylindrical annulus with circumferential fins. Padmanabhan, P.V., et al., [1986, p.1773-1779, eng] **41-3295**
- Freezing. Haymet, A.D.J., [1987, p.1076-1080, eng] **41-3409**
- Water activity and freezing point depression of food systems. Chen, C.S., [1987, p.433-435, eng] **41-3574**
- Crystallization of freezing mixture in porous media. Entov, V.M., et al., [1986, p.447-449, eng] **41-3628**
- Coalescence-freezing precipitation mechanism. Braham, R.R., Jr., [1986, p.142-145, eng] **41-3752**
- Using GOES thermal infrared data to map cirrus freeze zones. Shih, S.F., et al., [1987, p.737-743, eng] **41-3777**
- Implementing direct filtration and natural freezing of aluminum sludge. Fitch, D.E., et al., [1986, p.52-56, eng] **41-3779**
- Winter weather records relating to potential frost failure of brickwork. Beardmore, C., et al., [1987, p.7-8, eng] **41-3801**
- Experiments on freeze-bonding between ice blocks in floating ice rubble. Ettema, R., et al., [1986, p.397-403, eng] **41-4295**
- Formation of frozen drops, conglomerates, and graupel. Parungo, F.P., et al., [1984, p.103-105, eng] **41-4378**
- Frozen drop embryos in Alberta hailstorms and their origins. English, M., et al., [1984, p.253-255, eng] **41-4394**
- Freezing of water and water-salt solutions around aluminum spheres. Chelliah, X., et al., [1987, p.437-446, eng] **41-4542**
- See also: Artificial freezing; Concrete freezing; Ice formation; Pipeline freezing; Regelation; Sea water freezing; Seasonal freeze thaw; Soil freezing; Spray freezing; Vacuum freezing
- Freezing depth**
- See: Frost penetration
- Freezing indexes**
- Investigation of seasonal load restrictions in Washington State. Mahoney, J.P., et al., [1985, p.58-67, eng] **41-609**
- Freezing nuclei**
- Is sleet a contact nucleation phenomenon. Hogan, A.W., [1985, p.290-294, eng] **41-1507**
- Freezing point depressants**
- See: Antifreezes
- Freezing points**
- Density effects on laminar convection in water pipes near 4°C. Cheng, K.C., et al., [1978, p.67-72, eng] **41-464**
- Ice pumps and their rates. Lewis, E.L., et al., [1986, p.11,756-11,762, eng] **41-1024**
- Moisture in hygroscopic materials. Efimov, S.S., [1986, 160p., rus] **41-1044**
- Freezing temperatures of aqueous solutions. Sun, S.K., et al., [1986, p.705-715, eng] **41-1552**
- Freezing temperatures of water, alkanolic acids and their mixtures. Barr, R.S., et al., [1986, p.79-86, eng] **41-2017**
- Effect of polysaccharide stabilizers on the rate of growth of ice. Muhr, A.H., et al., [1986, p.683-710, eng] **41-2491**
- Realization of the ice point. Georgiuss, R.S., [1986, p.573-575, eng] **41-3304**
- See also: Melting points
- Freezing rate**
- Wind effect on artificial ice formation in sprinkler cones. Sosnovskii, A.V., [1986, p.225-230, rus] **41-140**
- Comment on "Oxygen budget of a perennially ice-covered antarctic lake (and Reply). Top, Z., [1987, p.520-521, eng] **41-4226**
- Friction**
- One more froude number paradox. Anno, Y., [1987, p.307, eng] **41-3040**
- Mobility of large-scale avalanche. Izumi, K., [1985, p.187-194, jpn] **41-4587**

- See also: Ice friction; Metal ice friction; Metal snow friction; Plastics ice friction; Plastics snow friction; Rubber ice friction; Rubber snow friction; Skid resistance; Wood ice friction; Wood snow friction
- Frost**
- Heat transfer in frost and snow. Auracher, H., [1978, p.25-30, eng] 41-466
- Frost formation between closely spaced parallel plates. Kamath, J., [1985, 121p., eng] 41-985
- Sulfur dioxide ice on Io. Cruikshank, D.P., et al., [1985, p.805-815, eng] 41-1739
- Frost action**
- Slopes and talus of NW Greenland. Malaure, J., [1985, p.63-79, fre] 41-374
- Waterproofing and corrosion prevention in hydraulic structures. Shchavlev, N.F., ed., [1985, 100p., rus] 41-431
- Corrosion resistance of steel cores of earth dams. Kuznetsov, V.S., et al., [1985, p.63-68, rus] 41-434
- Mobile hydraulic crane KMTTS-10. Vil'ner, A.D., [1986, p.37-38, rus] 41-438
- Nature of origin of earth hummocks, Breisterdalen, Jotunheimen/Norway. Bolster, S.J.S., [1985, p.94-115, eng] 41-586
- Arctic and subarctic construction: general provisions. Lobacz, E.F., [1986, 75p., eng] 41-663
- Cement science. Ramachandran, V.S., et al., [1984, p.1-53, eng] 41-1031
- Ice lensing in layered soils. Penner, E., [1986, p.334-340, eng] 41-1159
- Northern regions cryoturbation, Onion Portage, Alaska. Schweiger, C., [1985, p.127-141, eng] 41-1358
- Calculating frost resistance of structural elements. Kuz'min, V.R., [1986, 145p., rus] 41-1985
- Deformation of a pipeline by frost heave. [1987, p.10, eng] 41-2321
- Periglacial environments. Walker, H.J., [1986, p.82-96, eng] 41-2335
- Hydraulic construction in ports and engineering research in coastal zones of seas. Kostikov, V.D., ed., [1986, 169p., rus] 41-2709
- Influence of sub-zero temperatures on the performance of rubber shock-absorbers. Kotts, A.N., et al., [1986, p.95-98, rus] 41-2711
- Stress-strain state of the Sayano-Sushenskoe dam during filling of the reservoir. Aleksandrovskaia, E.K., [1986, p.123-129, eng] 41-2713
- Development of frost fracture systems in massive frozen ground. Gevorkian, S.G., [1986, p.78-82, rus] 41-2823
- Strength of materials and structural elements at low temperatures. Cherskii, N.V., ed., [1985, 119p., rus] 41-2846
- Calculating frost resistance of structural elements. Kuz'min, V.R., [1985, p.95-102, rus] 41-2852
- Ground freezing '85—a summary. Baker, T.H.W., et al., [1987, p.301-306, eng] 41-3039
- Deterioration of parking garages: preventative design. Tay, D.C.K., [1985, p.228-237, eng] 41-3193
- Relation between the susceptibility of permafrost landscapes and topographic dissection. Klimovskii, I.V., et al., [1986, p.113-121, rus] 41-3492
- Methods of evaluating and mapping the susceptibility of cryogenic landscapes. Fedorov, A.N., et al., [1986, p.121-133, rus] 41-3493
- Cryogenic factor in the evolution of landscape-geodynamic structures. Sadovskii, A.I., et al., [1986, p.153-165, rus] 41-3496
- Frost action on transportation facilities. Chisholm, R.A., [1983, 57p., eng] 41-3497
- Electric-arc welding under northern conditions. Larionov, V.P., [1986, 256p., rus] 41-3511
- Gelifluction lobe at Jotunheimen, Norway. Matthews, J.A., et al., [1986, p.345-360, eng] 41-3565
- Frost action in rocks. Hare, M.J., [1985, 168p., eng] 41-3646
- Cracking due to frost action in Portland cement concrete pavements—a literature survey. Sawan, J., [1987, p.781-803, eng] 41-3706
- Durability of concrete under arctic offshore conditions. Kivekas, L., et al., [1987, p.935-946, eng] 41-3714
- Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al., [1986, p.29-33, rus] 41-3767
- Facade elements clad with blinker finish. Orantie, K., [1987, 36p. + append., fin] 41-3844
- Development of spot medallions and circular fractures on their surface. Pukemo, M.N., [1987, p.85-89, rus] 41-4170
- Road subsurface drainage and frost action. Kozlov, G.S., [1984, 150p., eng] 41-4379
- Frost forecasting**
- Point probability distributions of frozen soil. Zuzel, J.F., et al., [1986, p.1681-1686, eng] 41-2501
- Frost heave**
- Rational use of shallow foundations on frost-heaving ground. Orlov, V.O., et al., [1985, p.16-17, rus] 41-281
- Operation of outdoor distribution systems in Chita City under frost heave conditions. Zhelezniak, I.I., et al., [1985, p.26-28, rus] 41-287
- Construction of low-rise buildings on seasonally freezing gravelly grounds. Polishchuk, A.I., et al., [1985, p.30-32, rus] 41-289
- Stresses on low-rise buildings on frost heaving ground. Abzhalmov, R.Sh., [1985, p.32-34, rus] 41-290
- One-story residential buildings with monolithic foundation plates built on weak fills and frost-heaving ground. Grigor'ev, P.I.A., [1985, p.37-39, rus] 41-292
- Shields designed to counteract frost heave. Pchelintsev, A.M., [1985, p.41-42, rus] 41-294
- Designing low-rise, shallow foundation buildings for frost heave. Setova, N.B., [1985, p.45-46, rus] 41-297
- Formula for calculating foundation stability and tangential frost heave forces. Elgin, B.B., [1985, p.52-53, rus] 41-301
- Formula for calculating horizontal forces produced by thawing ground. Bondarenko, G.I., [1985, p.53-55, rus] 41-302
- Interaction of shallow foundations with underlying seasonally freezing layers. Fursov, V.V., [1985, p.57-59, rus] 41-304
- Increasing the service life of hydraulic structures. Gavrilenko, V.I., et al., [1985, p.61-63, rus] 41-306
- Frost heave as an indication of ground water regime. Fedorov, V.I., [1985, p.65-70, rus] 41-308
- Results of field observations of seasonal ground freezing dynamics. Sazonov, G.M., [1985, Soil freezing, rus] 41-309
- Heaving pressure of ground freezing in a limited space. Kim, V.Kh., [1985, p.73-74, rus] 41-310
- Estimating the frost heave of clays according to swelling. Orlov, V.O., et al., [1985, p.76-78, rus] 41-312
- Quantitative estimation of frost heave of different grounds. Shesternov, D.M., [1985, p.78-80, rus] 41-313
- Frost heave of ground under variable loading. Orzhekhovskii, I.U.R., et al., [1985, p.80-82, rus] 41-314
- Water accumulation and frost heave in seasonally freezing ground. Ganeles, L.B., et al., [1985, p.82-83, rus] 41-315
- Compaction of elastic-clayey grounds below building foundations on fills. Aminova, L.I., [1985, p.87-89, rus] 41-318
- Development of frost heave deformations in freezing, coarsely elastic ground. Petrova, M.A., et al., [1985, p.89-91, rus] 41-319
- Formulas for calculating settlement of seasonally freezing ground. Pyshechev, N.F., [1985, p.91-93, rus] 41-320
- Calculating tangential frost-heaving forces of ground. Safronov, I.U.V., et al., [1985, p.93-95, rus] 41-321
- Deep seasonal freezing of ground in the southern Far East. Bykova, V.I., [1985, p.95-97, rus] 41-322
- Measuring instruments IPG-3 and IDMG-1 for frost heaving of ground. Lapshin, V.I.A., et al., [1985, p.105, rus] 41-327
- Formulas for calculating frost heave intensity. Ganeles, L.B., et al., [1985, p.106-107, rus] 41-328
- Field methods of estimating frost heave properties of grounds. Chechel', M.V., et al., [1985, p.108-110, rus] 41-329
- Studying frost heave in Chita City. Ivin, I.A., [1985, p.110, rus] 41-330
- Studying tangential forces of frost heave under laboratory conditions. Musorin, A.V., [1985, p.111, rus] 41-331
- Computerized forecasting of cryogenic processes. Sozoniuk, V.V., [1985, p.112, rus] 41-332
- Institute of Northern Engineering, 1985-1986 report. [1986, 48p., eng] 41-364
- Frost bulb with or without groundwater flow on a buried chilled Alaskan pipe. Perera, W.G., [1984, p.1850, 1855, eng] 41-457
- Waterproofing interlayers for the improvement of water- and thermal regime of roadbeds. Ruvinskii, V.I., et al., [1985, p.23-24, rus] 41-502
- Estimating design values of road freezing depths. Galvoronskii, V.N., [1986, p.12-13, rus] 41-510
- Structural monitoring concepts for arctic pipelines. Nyman, K.J., et al., [1986, p.47-66, eng] 41-643
- Pipeline frost heave predictions using a 2-D thermal model. Nixon, J.F., [1986, p.67-82, eng] 41-644
- Scientific and technical progress in road construction. Altmatov, I.T., ed., [1984, 188p., rus] 41-785
- Influence of thermoinsulative layers on temperature regime of road pavements. Dulshenaliev, M., [1984, p.140-145, rus] 41-786
- Mathematical model of frost heave in freezing soils. Hromadka, T.V., II, [1980, 178p., eng] 41-899
- Ice lensing in layered soils. Penner, E., [1986, p.334-340, eng] 41-1159
- Internal stresses in frozen ground: Discussion. Konrad, J.M., [1986, p.408-410, eng] 41-1162
- Particle size distribution in patterned ground, Niwot Ridge, Colorado. Rissing, J.M., et al., [1985, p.153-163, eng] 41-1226
- Device for monitoring soil movement in peatlands. Nelson, F.E., [1986, p.275-281, eng] 41-1258
- Thermal and moisture regimes of clay soils in aeration zones of construction sites in the Far East and the prevention of flooding. Fedorov, V.I., [1985, p.93-104, rus] 41-1364
- Power plant construction on permafrost. Shtelman, A.Sh., [1986, p.8-12, rus] 41-1400
- Frame of the main building of the Neryungri power plant. Pavliukov, S.I., [1986, p.13-17, rus] 41-1401
- Frost heaving classifications of the coarse grained soil. Wang, Z., [1986, p.195-200, chi] 41-1415
- Frost heave of a channel with concrete lining. Zhu, D., et al., [1986, p.201-208, chi] 41-1416
- Some characteristics of unsaturated clay during freezing. Chen, X., et al., [1986, p.209-216, chi] 41-1417
- Influence of moisture condition on frost heave in clay. Xu, B., et al., [1986, p.217-222, chi] 41-1418
- Discussion on critical water content of frost heave. Chen, J., [1986, p.223-226, chi] 41-1419
- Anti-heave effect of middle coarse sand cushion. Zhou, Y., [1986, p.227-232, chi] 41-1420
- Experimental study on frost susceptibility of wind-blown sands. Chen, X., et al., [1986, p.233-238, chi] 41-1421
- Anti-heave effect of wind-blown sands in irrigation canals. Zhu, D., et al., [1986, p.239-244, chi] 41-1422
- Soil slope stability in a channel with plastic lining. Zhou, L., [1986, p.245-248, chi] 41-1423
- Effect of frost heave on shallow foundations. Xu, B., [1986, p.249-252, chi] 41-1424
- Discussion on maximum seasonal frost depth of ground. Pang, G., [1986, p.253-254, chi] 41-1425
- Frost-heave forces acting on the foundation base. Xu, Z., [1986, p.255-260, chi] 41-1426
- Introduction of anti-heave bridge with anchor striped foundation. Huang, Z., [1986, p.267-270, chi] 41-1428
- Arch and hollow foundation for anti-heave. Zhong, Z., [1986, p.271-174, chi] 41-1429
- Frost crack of buildings and its treatment methods in cold regions. Tang, S., [1986, p.275-280, chi] 41-1430
- Analysis about frost-crack damage of retaining wall. Xia, Z., [1986, p.281-286, chi] 41-1431
- Discussion on crevasse in frozen earth. Pang, G., [1986, p.287-290, chi] 41-1432
- Salt and frost heave damage of lining in hydraulic structures. Wang, Y., [1986, p.291-294, chi] 41-1433
- Frost heave damage control in hydraulic structures. Wei, G., [1986, p.295-298, chi] 41-1434
- Frost damage and prevention in hydraulic structures. Qi, Z., et al., [1986, p.299-304, chi] 41-1435
- Anti-heave technology survey for hydraulic structures. Chen, X., [1986, p.305-308, chi] 41-1436
- Concrete linings of hydraulic structures to prevent frost heave. Zhu, C., [1986, p.309-312, chi] 41-1437
- Frost damage of a channel with concrete lining. Luo, Y., [1986, p.313-318, chi] 41-1438
- Frost test instrument, DM-10. Xie, Y., et al., [1986, p.319-324, chi] 41-1439
- Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al., [1986, p.37-49, rus] 41-1537
- Bulletin of scientific-technical information. Power engineering of Southern Yakutia. Petrov, N.A., ed., [1984, 32p., rus] 41-1829
- Winter soil moisture regime. Ryden, B.E., [1986, p.175-184, eng] 41-1876
- Influence of frost-heaving on soil chemistry and vegetation. Jonasson, S., [1986, p.185-195, eng] 41-1877
- Soil freezing and frost heave, N.W.T., Canada. Nixon, J.F., [1986, p.436-438, eng] 41-1929
- Internal pressures in freezing soils. Wood, J.A., [1985, 261p., eng] 41-2015
- Formation of segregated ice and frost heave of clays. Zamolotchikova, S.A., [1986, p.127-136, rus] 41-2093
- Field studies of stresses in freezing ground in the active layer. Lebedenko, I.U.F., et al., [1986, p.163-169, rus] 41-2096
- Effective sectional road pavements for northern regions and Siberia. Karpov, B.N., et al., [1986, 96p., rus] 41-2211
- Cryogenic deformations in reclaimed lands of the Khanka plain. Ral'ko, V.D., [1986, p.160-162, rus] 41-2251
- Deformation of a pipeline by frost heave. [1987, p.10, eng] 41-2321
- Bank conditions and erosion along selected reservoirs. Gatto, L.W., et al., [1987, p.143-154, eng] 41-2495
- Workshop on Subsea Permafrost and Pipelines in Permafrost, 1985. [1986, 168p., eng] 41-2507
- Design of Norman Wells pipeline for frost heave and thaw settlement. Nixon, J.F., et al., [1986, p.67-85, eng] 41-2516
- Quill Creek test facility. Fielder, D.E., [1986, p.86-115, eng] 41-2517
- Canada-France buried chilled pipeline experiment. Williams, P.J., [1986, p.152-159, eng] 41-2521
- Designing canal linings for frost heaving ground. Altimov, A.G., [1986, p.19-24, rus] 41-2554
- RIGIDICE model of frost heave and its input functions. Black, P.B., [1986, 111p., eng] 41-2581
- Evaluation of selected frost-susceptibility test methods. Chamberlain, E.J., [1986, 51p., eng] 41-2614
- JARE-27 field report, Sör Rondane Mountains, 1986. Moriaki, K., et al., [1986, p.246-281, jpn] 41-2695

**Frost heave (cont.)**

- Structures of foundations designed for perennially frozen strongly deformable grounds. Kogodovskii, O.A., et al, [1986, p.29-32, rus] 41-2797
- Methods of classifying frost-heave parameters for compiling a map of rock-heave types. Lebedenko, I.U.P., [1986, p.83-96, rus] 41-2824
- Classifier of cryogenic rock-heave. Lefbman, M.O., et al, [1986, p.97-103, rus] 41-2825
- Long-range frost heave manifestations in NW Siberia. Kuznetsova, I.L., [1986, p.116-123, rus] 41-2827
- Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p., rus] 41-2911
- Symposium on Unbound Aggregates in Roads, 1981. [1981, 207p., eng] 41-2923
- Granular base and sub-base materials. Hill, J., [1981, p.33-38, eng] 41-2924
- Frost susceptibility tests and their application. Jones, R.H., [1981, p.45-50, eng] 41-2925
- Grading and frost heave. Hughes, R., [1981, p.51-56, eng] 41-2926
- Frost heave compliance testing in Scotland. Fairley, H.G., [1981, p.57-62, eng] 41-2927
- Research at TRRL on the frost-susceptibility of roadmaking materials. Sherwood, P.T., [1981, p.151-160, eng] 41-2928
- Winter air temperatures in relation to frost damage in roads. Sherwood, P.T., et al, [1986, 15p., eng] 41-2934
- Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, [1987, 144p., rus] 41-2983
- Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant. Golli, O.R., [1985, p.52-56, rus] 41-3127
- Frost action on roads and airfields. Johnson, T.C., et al, [1986, 45p., eng] 41-3143
- Pipelines and permafrost—science in a cold climate. Williams, P.J., [1986, 129p., eng] 41-3188
- Sensitivity of the arctic environment. French, H.M., [1987, p.154-163, eng] 41-3237
- Freeze-thaw test to determine the frost susceptibility of soils. Chamberlain, E.J., [1987, 90p., eng] 41-3258
- Phase-change heat transfer in porous media. Torrance, K.E., [1986, p.181-188, eng] 41-3289
- Engineering and geological conditions of construction and operation of hydraulic structures built on perennially frozen hard rocks. Kagan, A.A., et al, [1986, p.34-44, rus] 41-3444
- Modeling frost penetration and frost heave. Golli, O.R., [1986, p.53-61, rus] 41-3446
- Observations and predictions of frost heave around a chilled pipeline. Dallimore, S.R., [1985, 110p., eng] 41-3647
- Solution model for soil freezing. Horiguchi, K., [1986, p.69-82, jpn] 41-3881
- Frost-heave analysis based upon a heat and water flow model. Fukuda, M., et al, [1986, p.83-97, jpn] 41-3882
- In situ* frost heaving test based on the segregation potential concept. Fukuda, M., et al, [1986, p.99-107, jpn] 41-3883
- Experimental studies on reducing methods of uplift force to a steel pipe. Fukuda, M., et al, [1986, p.109-120, jpn] 41-3884
- Natural electrical potentials that arise when soils freeze. Yarkin, I.G., [1986, 24p., eng] 41-3929
- Frost heave in permafrost. Mackay, J.R., et al, [1987, p.37-41, eng] 41-4008
- Polystyrene used in pavement subjected to low temperature. MacMaster, J.B., et al, [1987, p.575-618, eng] 41-4037
- Thermally induced heave beneath chilled pipelines in frozen ground. Nixon, J.F., [1987, p.260-266, eng] 41-4055
- Osmotic model for soil freezing. Horiguchi, K., [1987, p.13-22, eng] 41-4212
- Procedure for determining the segregation potential of freezing soils. Konrad, J.M., [1987, p.51-58, eng] 41-4537
- Experimental study on prevention of differential frost heave by using Geogrid. Oayama, K., et al, [1985, p.179-186, jpn] 41-4586
- Offshore and Arctic pipelines—1987. [1987, 199p., eng] 41-4628
- Pipeline frost heave predictions. Nixon, J.F., [1987, p.109-114, eng] 41-4631
- Frost mounds**
- Growth mechanisms in aggradation palsas. Outcalt, S.I., et al, [1984, p.65-78, eng] 41-626
- Remarks on the origin of palsa frost mounds. Jahn, A., [1986, p.123-130, eng] 41-1347
- Glacial and periglacial investigations in Skidadalum, Tröllaskagi, Northern Iceland. Müller, H.-N., et al, [1986, p.1-18, eng] 41-1788
- Origin of palsas. Seppälä, M., [1986, p.141-147, eng] 41-1872
- Pingos and palsas in northernmost Sweden. Lagerbäck, R., et al, [1986, p.149-154, eng] 41-1873
- Permafrost mounds in the Abisko area, northern Sweden. Akerman, H.J., et al, [1986, p.155-165, eng] 41-1874
- Palsa formation in North-Central Alaska. Hinkel, K.M., [1986, 217p., eng] 41-2640
- Morphology, genesis and temporal context of the Aishihik pingo (SW Yukon). Geurts, M.A., et al, [1985, p.291-298, fre] 41-2761
- Long-range frost heave manifestations in NW Siberia. Kuznetsova, I.L., [1986, p.116-123, rus] 41-2827
- Positive mesorelief forms as the result of ground ice formation. Belopukhova, E.B., et al, [1986, p.296-302, eng] 41-3620
- Studies of migration frost mounds with the use of multiband aerial photographs. Gromova, E.I., [1983, p.142-150, rus] 41-4612
- See also: Hummocks; Pingos
- Frost penetration**
- Injection ice formation during subaqueous freezing of sediments. Gravis, G.F., [1986, p.108-112, rus] 41-116
- Factors controlling ground frost on an aapa mire in Kuusamo, Finland. Koutaniemi, L., et al, [1986, p.60-67, fin] 41-187
- Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985). Sa'nikov, P.I., ed, [1985, 119p., rus] 41-276
- Experience and prospects for using seasonally freezing grounds as foundations. Orlov, V.O., et al, [1985, p.3-11, rus] 41-277
- Pile foundations for buildings on deep freezing ground. Moiseichik, E.K., [1985, p.22-23, rus] 41-284
- Designing low-load foundations of rural buildings in Transbaikalia. Makarov, A.P., et al, [1985, p.59-61, rus] 41-305
- Frost heave as an indication of ground water regime. Fedorov, V.I., [1985, p.65-70, rus] 41-308
- Results of field observations of seasonal ground freezing dynamics. Sazonov, G.M., [1985, Soil freezing, rus] 41-309
- Heaving pressure of ground freezing in a limited space. Kim, V.Kh., [1985, p.73-74, rus] 41-310
- Frost heave of ground under variable loading. Orzhekhovskii, I.U.R., et al, [1985, p.80-82, rus] 41-314
- Water accumulation and frost heave in seasonally freezing ground. Ganeles, L.B., et al, [1985, p.82-83, rus] 41-315
- Deep seasonal freezing of ground in the southern Far East. Bykova, V.I., [1985, p.95-97, rus] 41-322
- Formulas for calculating frost heave intensity. Ganeles, L.B., et al, [1985, p.106-107, rus] 41-328
- Studying frost heave in Chita City. Ivin, I.A., [1985, p.110, rus] 41-330
- Calculating frost resistance of road pavements. Efimenko, V.N., et al, [1985, p.18-19, rus] 41-308
- Estimating design values of road freezing depths. Galvoronskii, V.N., [1986, p.12-13, rus] 41-510
- Problems in soil stabilization. Motylev, I.U.L., [1986, p.10-11, rus] 41-513
- Impulse method of describing non-equilibrium cryogenic physical-geological processes. Koval'kov, V.P., [1986, p.101-115, rus] 41-603
- Investigation of seasonal load restrictions in Washington State. Mahoney, J.P., et al, [1985, p.58-67, eng] 41-609
- Arctic and subarctic construction: general provisions. Lobacz, E.F., [1986, 75p., eng] 41-663
- Scientific and technical progress in road construction. Altmatov, I.T., ed, [1984, 188p., rus] 41-785
- Influence of thermoinsulative layers on temperature regime of road pavements. Dulshenaliyev, M., [1984, p.140-145, rus] 41-786
- Study of buried-pipe failures in cold climates. Bahmanyar, G.H., [1982, 205p., eng] 41-900
- Experimental study on frost susceptibility of wind-blown sands. Chen, X., et al, [1986, p.233-238, chi] 41-1421
- Effect of frost heave on shallow foundations. Xu, B., [1986, p.249-252, chi] 41-1424
- Discussion on maximum seasonal frost depth of ground. Pang, G., [1986, p.253-254, chi] 41-1425
- Winter soil moisture regime. Rydén, B.E., [1986, p.175-184, eng] 41-1876
- Polystyrene foam used in construction of road and airport pavements. Ivanov, V.N., [1986, p.14-16, rus] 41-1882
- Formulas for calculating deformation modulus of frozen ground. Slashchilin, O.A., [1986, p.8-9, rus] 41-1883
- Freeze-thaw of pore moisture in sandy rocks. Medvedskii, R.I., [1986, p.543-549, eng] 41-1894
- Mathematical model of the freezing process of concrete. Olsen, M.P.J., [1984, p.113-122, eng] 41-2002
- Formation of segregated ice and frost heave of clays. Zamolotchikova, S.A., [1986, p.127-136, rus] 41-2093
- Experimental studies of injected ice formation in fine-grained rocks. Ershov, E.D., et al, [1986, p.136-149, rus] 41-2094
- Cryogenic structure of active layer rocks in Yamal Peninsula. Ershov, E.D., et al, [1986, p.149-162, rus] 41-2095
- Frost penetration effect on blasting parameters of seasonally freezing ground. Frash, G.B., et al, [1986, p.55-59, rus] 41-2142
- Cryogenic deformations in reclaimed lands of the Khanka plain. Ral'ko, V.D., [1986, p.160-162, rus] 41-2251
- Evaluating the solutions of nonlinear problems on freezing and thawing of moist ground. Danielian, I.U.S., et al, [1986, p.350-353, rus] 41-2306
- Freeze thaw simulations on quartz-micaschist on Signy Island. Hall, K., [1986, p.19-30, eng] 41-2359
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed, [1986, 198p., rus] 41-2373
- Clear-felling impact on properties of sandy podzols in northern Karelia. Lazareva, I.P., et al, [1986, p.61-79, rus] 41-2376
- Permafrost formation in littoral and sublittoral zones of northern Eurasia. Maslov, A.D., [1986, p.79-85, rus] 41-2539
- Water freezing and ice melting in fine-grained rocks. Ershov, E.D., [1986, p.53-66, rus] 41-2540
- Energy transfer in soil with nonequilibrium phase transformation. Danielian, I.U.S., et al, [1986, p.156-161, rus] 41-2558
- Winter migration of soil water in the Devitsa River basin. Medvedev, M.I.U., et al, [1985, p.90-104, rus] 41-2731
- Development of frost fracture systems in massive frozen ground. Gevorkian, S.G., [1986, p.78-82, rus] 41-2823
- Methods of classifying frost-heave parameters for compiling a map of rock-heave types. Lebedenko, I.U.P., [1986, p.83-96, rus] 41-2824
- Development of Holocene peat hummocks in northwestern Siberia. Vasil'chuk, I.U.K., et al, [1986, p.123-128, rus] 41-2828
- Cryogenic processes in the formation of swamp microrrelief. Maksimova, L.N., et al, [1986, p.147-151, rus] 41-2833
- Winter air temperatures in relation to frost damage in roads. Sherwood, P.T., et al, [1986, 15p., eng] 41-2934
- Freezing of water and melting of ice in disperse rocks. Ershov, E.D., [1986, p.55-67, eng] 41-3016
- Determination of the thickness of the frozen zone in soils. Baker, T.H.W., et al, [1982, 8p., eng] 41-3228
- Dynamics of ice-rock barriers under conditions of freezing of filtering rocks. Chugunov, V.A., et al, [1987, p.981-986, eng] 41-3242
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] 41-3249
- Phase composition of moisture in freezing disperse rocks. Danielian, I.U.S., et al, [1986, p.52-59, rus] 41-3395
- Temperature and time dependence of frozen ground strength. Kononov, A.A., [1986, p.74-84, rus] 41-3396
- Modeling frost penetration and frost heave. Golli, O.R., [1986, p.53-61, rus] 41-3446
- Building hydraulic structures on perennially frozen rocks. Novikov, N.F., [1986, p.62-66, rus] 41-3447
- Simultaneous calculation of temperature and stresses in freezing-thawing ground. Ukhov, S.B., et al, [1986, p.96-106, rus] 41-3452
- Frost action on transportation facilities. Chisholm, R.A., [1983, 57p., eng] 41-3497
- Using tractor rippers on frozen grounds. Beliakov, I.U.I., et al, [1982, p.40-46, rus] 41-3546
- Ground water formation in southern Tyumen' region. Soloboeva, L.A., [1987, p.131-136, rus] 41-3651
- Freezing and thawing of drained peat soils in mountain forests. Chindinev, A.S., [1987, p.60-64, rus] 41-3737
- Calculating frost penetration into rocks of a cylindrical cavity. Dugartysrenov, A.V., et al, [1986, p.21-24, rus] 41-3770
- Protective forest strips in cold dry steppes. Lamin, L.A., [1985, p.79-87, rus] 41-3981
- Remote frost depth monitoring. Connor, B., [1984, 13p., eng] 41-4075
- Soil climate in southeastern West Siberia. Az'muka, T.I., et al, [1984, p.26-31, rus] 41-4088
- Sub-drainage systems in cryogenic peat soils. Loginov, I.I., et al, [1984, p.51-52, rus] 41-4089
- Biologic activities in forest soils of the Angara-Yenisey region. Sorokin, N.D., et al, [1985, p.35-47, rus] 41-4110
- Solution of the self-simulating problem of heat and moisture transfer during freezing of disperse soils. Ianitskii, P.A., [1987, p.1338-1344, eng] 41-4163
- Winter roads in the Arkhangel'sk forests. Iakovenko, I.U.G., [1987, p.40-45, rus] 41-4172
- Cryosphere and the zonality of soil melioration processes. Mel'nikov, P.I., et al, [1986, p.94-98, rus] 41-4468
- Regularities governing the development of forms of artificially frozen zones obtained by seasonally active freezing devices. Koval'kov, V.P., [1983, p.58-71, rus] 41-4475
- Practical suggestions for calculating soil temperature regime (current awareness material). Fel'dman, G.M., [1985, 69p., rus] 41-4611



- Stability of a plane crystallization front moving at constant velocity. Badratinova, L.G., [1983, p.388-394, eng] 41-4613
- Deformation of pore-space structure in freezing fines. Lebedenko, I.U.P., [1987, p.50-63, rus] 41-4622
- See also: Thaw depth
- Frost protection**
- Plastic foam—from frost protection to road embankments. Refsdal, G., [1985, p.16-19, eng] 41-335
- Freeze protection of ships and shipborne equipment. Roberts, J., et al, [1986, p.500-542, eng] 41-954
- Shelters provide bad-weather protection, secure construction progress. [1986, p.1424-1429, ger] 41-1563
- Determining optimal parameters of thermal protection for dredging grounds. Rashkin, A.V., et al, [1986, p.214-217, rus] 41-2181
- Frost insulation in rock tunnels. Pedersen, K.B., et al, [1986, p.15-18, eng] 41-2261
- Chemical method of treating soils. Migliachenko, V.P., [1986, p.17-18, rus] 41-2556
- Energy-saving techniques for winter works. Zhutko, P.A., [1986, p.18-20, rus] 41-2557
- Dust control in coal quarries at subzero temperatures. Kupin, A.N., et al, [1985, p.153-154, rus] 41-2774
- Methods of protecting hydraulic structure concretes from frost. Davidenko, V.M., et al, [1986, p.293-299, eng] 41-2940
- Thermal protection for the Waterloo Dam, northern Saskatchewan. Noonan, D.K.J., et al, [1982, p.437-449, eng] 41-3751
- Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al, [1986, p.29-33, rus] 41-3767
- Frost resistance**
- Methods of estimating the efficiency of new surface-active additives. Sudakov, V.B., et al, [1985, p.3-9, rus] 41-414
- New air-entrainment and plastifying admixture for concretes. Berger, T.F., et al, [1985, p.9-13, rus] 41-415
- Concretes with polyfunctional admixtures. Sudakov, V.B., et al, [1985, p.13-17, rus] 41-416
- Frost resistance of concretes and their structure. Bel', A.A., [1985, p.36-38, rus] 41-417
- Increasing the safety of energy-producing structures under dynamic loading. Shelinin, I.S., ed, [1985, 113p., rus] 41-426
- Modeling dynamic phenomena in power engineering structures. Samsonova, T.I., et al, [1985, p.7-13, rus] 41-427
- Calculating frost resistance of road pavements. Efimenko, V.N., et al, [1985, p.18-19, rus] 41-508
- Stabilization of fine-grained soil for road and airfield construction. Danyluk, L.S., [1986, 37p., eng] 41-540
- Properties of slag concrete. Ruohomäki, J., et al, [1986, 43p., fin] 41-604
- Reducing the amount of cement and fuel used in the production of prefabricated reinforced concrete. Dvorkin, L.I., [1985, 99p. (Pertinent p.50-69), rus] 41-650
- Nondestructive testing of frost-resistant concrete piles. Ponomarev, O.I., et al, [1986, p.62-63, rus] 41-883
- Picovoltmeters used in low-temperature research. Krasnopolin, I.A., [1986, p.1427-1431, eng] 41-994
- Concrete admixtures handbook: properties, science, and technology. Ramachandran, V.S., ed, [1984, 626p., eng] 41-1030
- Antifreezing admixtures. Ratnov, V.B., et al, [1984, p.430-479, eng] 41-1032
- Soil-aggregate-fabric systems in frost susceptible roads. Hoover, J.M., et al, [1981, p.6-14, eng] 41-1038
- Problems of technical tribology in Arctic service conditions. Cherskii, I.N., et al, [1986, p.779-792, eng] 41-1132
- Frost-resistant fluoroplastic seals for arctic machinery. Popov, S.N., et al, [1986, p.933-951, eng] 41-1139
- Porosity and frost resistance of portland cement mortars. Feldman, R.F., [1986, p.973-989, eng] 41-1154
- Frost-resistant coated optical fibres. Abramov, A.A., et al, [1985, p.805-807, eng] 41-1411
- Experimental study on frost susceptibility of wind-blown sands. Chen, X., et al, [1986, p.233-238, chi] 41-1421
- Winter concreting using heated formwork. Belvel', A.S., et al, [1986, p.28-29, rus] 41-1535
- Properties of combined aggregate concretes of centrifugal power line supports. Shurygin, V.P., et al, [1985, p.5-11, rus] 41-1542
- High frost resistance of concrete objects impregnated with polymer solutions. Belov, L.F., et al, [1985, p.41-50, rus] 41-1544
- Using stress transducers in predicting frost resistance of concrete. Ter-Gazarian, G.N., et al, [1985, p.85-88, rus] 41-1622
- Pine needles unable to survive rapid temperature changes. Rodionov, V.S., et al, [1985, p.934-939, rus] 41-1827
- Introduced cold-resistant woody plants in Siberia. Vstovskaya, T.N., [1986, p.22-24, rus] 41-1833
- Frost resistance criteria of cellular, autoclave-hardened concretes. Shefkin, A.E., et al, [1986, p.31-32, rus] 41-1884
- Calculating the frost resistance of concrete. Moakvin, V.M., [1986, p.7-8, rus] 41-1885
- Increasing frost resistance of steel bridges. Bol'shakov, K.P., [1986, p.12-14, rus] 41-1888
- Calculating frost resistance of structural elements. Kuz'min, V.R., [1986, 145p., rus] 41-1985
- Structural heat-engineering for road pavements. Mikhailov, A.V., et al, [1986, 149p., rus] 41-2210
- Iron ore wastes used in construction materials in the North. Prokof'eva, V.V., et al, [1986, 176p., rus] 41-2214
- Freezing and higher plants. Grout, B.W.W., [1986, p.203-207, eng] 41-2224
- Induction of freezing tolerance in embryonic culture of *Brassica napus*. Orr, W., et al, [1986, p.23-32, eng] 41-2225
- Service life of concrete structures. Vesikari, E., [1986, 88p., fin] 41-2484
- Frost resistance and hardening of concrete. Ruohomäki, J., [1986, 35p. + append., fin] 41-2523
- Calculating frost resistance of concrete used in land reclamation construction. Shlaen, A.G., [1986, p.19-22, rus] 41-2553
- Evaluation of selected frost-susceptibility test methods. Chamberlain, E.J., [1986, 51p., eng] 41-2614
- Nature of fines produced in aggregate processing. Pintner, R.M., et al, [1987, p.10-21, eng] 41-2765
- Calculating the cold resistance of shipbuilding steel. Sokolov, A.O., [1987, p.42-43, rus] 41-2787
- Concrete strength frost-tested after 4 years and after 28 days. Ianbykh, N.N., [1986, p.36-37, rus] 41-2789
- Conditions of cold resistance and durability of structural elements in the North. Lyglaev, A.V., [1985, p.83-90, rus] 41-2851
- Fumigation system for study of pollution and cold stress on plants. Lucas, P.W., et al, [1987, p.15-28, eng] 41-2858
- Freeze-thaw durability of concrete with and without silica fume. Pigeon, M., et al, [1986, p.76-85, eng] 41-2897
- Interrelationships among components of biogeocenoses in southern taiga. Smirnov, A.V., ed, [1986, 120p., rus] 41-2898
- Moisture deficiency in some trees during fall-winter seasons. Nevskii, L.M., [1986, p.97-100, rus] 41-2900
- Qualities of lightweight concrete used for Arctic offshore platform. Tachibana, D., et al, [1987, p.7-15, eng] 41-2922
- Frost susceptibility tests and their application. Jones, R.H., [1981, p.45-50, eng] 41-2925
- Grading and frost heave. Hughes, R., [1981, p.51-56, eng] 41-2926
- Frost heave compliance testing in Scotland. Fairley, H.G., [1981, p.57-62, eng] 41-2927
- Research at TRRL on the frost-susceptibility of roadmaking materials. Sherwood, P.T., [1981, p.151-160, eng] 41-2928
- Methods of protecting hydraulic structure concretes from frost. Davidenko, V.M., et al, [1986, p.293-299, eng] 41-2940
- Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant. Golli, O.R., [1985, p.52-56, rus] 41-3127
- Frost action on roads and airfields. Johnson, T.C., et al, [1986, 45p., eng] 41-3143
- Service life of flexible elements subject to freeze-thaw cycles. Krakovskii, M.B., et al, [1986, p.19-20, rus] 41-3207
- Damage mechanism of cyclic freezing-thawing in sulfur concrete. Cohen, M.D., [1987, p.357-360, eng] 41-3215
- Freeze-thaw test to determine the frost susceptibility of soils. Chamberlain, E.J., [1987, 90p., eng] 41-3258
- Studies of pore structure of concretes with air-entrainment admixtures. Ianbykh, N.N., [1987, p.34-35, rus] 41-3614
- Criteria of concrete frost resistance. Dvorkin, L.I., [1986, p.105-109, rus] 41-3665
- Frost susceptibility of high-strength concrete. Phillo, R., [1987, p.819-842, eng] 41-3708
- Effect of curing and type of cement on the resistance of concrete to freezing in deicing salt solutions. Gunter, M., et al, [1987, p.877-899, eng] 41-3711
- Freezing and thawing resistance of concrete containing chloride. Yamato, T., et al, [1987, p.901-917, eng] 41-3712
- Theoretical aspect and methods of testing concrete resistance to freezing and deicing chemicals. Bjugovic, D., et al, [1987, p.947-971, eng] 41-3715
- Evaluation and prediction of concrete durability—Ontario Hydro's experience. Sturup, V., et al, [1987, p.1121-1154, eng] 41-3721
- Freeze thaw durability of concretes with fly ash and microsilica. Johnston, C., [1987, p.1183-1204, eng] 41-3723
- Methodology of modeling for concrete durability. Samarin, A., [1987, p.1205-1225, eng] 41-3724
- Thermal protection for the Waterloo Dam, northern Saskatchewan. Noonan, D.K.J., et al, [1982, p.437-449, eng] 41-3751
- Improved conductivity method for the measurement of frost hardness. Zhang, M.I.N., et al, [1987, p.710-715, eng] 41-3778
- Winter weather records relating to potential frost failure of brickwork. Beardmore, C., et al, [1987, p.7-8, eng] 41-3801
- Concrete with A.C.F. admixture for transportation engineering. Solomatov, V.I., et al, [1986, 63p., rus] 41-3803
- Methods of acting on the state of stress of massive concrete hydraulic structures. Garkun, L.M., et al, [1987, 111p., rus] 41-4123
- Effects of freeze-thaw cycles on the microstructure of hydration products. Pigeon, M., et al, [1986, p.1-19, eng] 41-4141
- Effect of a freeze-thaw cycle on properties of microosomal membranes from wheat. Borochov, A., et al, [1987, p.131-134, eng] 41-4178
- Frost susceptibility of soil in relation to ice lens formation. Takeda, K., [1987, p.75-86, jpn] 41-4322
- Research in building engineering. Structural thermodynamics. Service life of structures. Polonskii, V.P., ed, [1986, 179p., rus] 41-4500
- Frost resistance of autoclaved materials. Pisker, V.A., [1986, p.31-39, rus] 41-4501
- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., [1986, p.122-167, rus] 41-4502
- Frost resistance and waterproofness of steamed fine-grained concretes. Orlov, M.T., et al, [1987, p.74-77, rus] 41-4626
- Frost shattering**
- Frost fissures and their importance for soil genesis. Kulikov, A.I., et al, [1986, p.41-44, eng] 41-993
- Methods of studying cryogenic relief-forming processes at research stations. Zhigarev, L.A., et al, [1986, p.111-119, rus] 41-1199
- Effect of humidity and temperature on rocks in cold climates. Fahey, B.D., et al, [1984, p.291-298, eng] 41-1231
- Experimental frost shattering of some precambrian rocks, Finland. Lautridou, J.P., et al, [1986, p.89-100, eng] 41-1847
- Protalus rampart related to alpine flows in Japanese Alps. Ono, Y., et al, [1986, p.213-223, eng] 41-1880
- Winter air temperatures in relation to frost damage in roads. Sherwood, P.T., et al, [1986, 15p., eng] 41-2934
- Frost action in rocks. Hare, M.J., [1985, 168p., eng] 41-3646
- Thermal break-up of frozen cohesive rocks. Mochalov, V.I., et al, [1986, p.68-69, rus] 41-3765
- Winter weather records relating to potential frost failure of brickwork. Beardmore, C., et al, [1987, p.7-8, eng] 41-3801
- Role of gas-liquid inclusions in cryogenic shattering of quartz. Rogov, V.V., [1987, p.81-85, rus] 41-4169
- Conditions for crack propagation by frost wedging. Tharp, T.M., [1987, p.94-102, eng] 41-4210
- Frost weathering**
- Weathering pit development, Otago Mts., New Zealand. Fahey, B.D., [1986, p.337-347, eng] 41-1181
- Physical basis of frost weathering. Walder, J.S., et al, [1986, p.27-32, eng] 41-1185
- Methods of geomorphological field experiments in the USSR. Dedkov, A.P., ed, [1986, 160p., rus] 41-1197
- Methods of studying cryogenic relief-forming processes at research stations. Zhigarev, L.A., et al, [1986, p.111-119, rus] 41-1199
- Studying cryogenic processes at research institutes. Ivanovskii, L.N., et al, [1986, p.136-149, rus] 41-1202
- Rock moisture content and frost weathering. McGreevy, J.P., et al, [1985, p.337-346, eng] 41-1252
- Periglacial weathering of the mountain massifs, SW Spitsbergen. Martini, A., [1986, p.45-73, eng] 41-1551
- Influence of paleo-cryogenic microrelief on erosional processes and soil formation in the central Russian Plain. Velichko, A.A., et al, [1986, p.102-113, rus] 41-1823
- Present-day geomorphological processes on Prins Oscars Land, Svalbard. Rudberg, S., [1986, p.41-63, eng] 41-1845
- Freeze thaw simulations on quartz-micaschist on Signy Island. Hall, K., [1986, p.19-30, eng] 41-2359
- Bank conditions and erosion along selected reservoirs. Gatto, L.W., et al, [1987, p.143-154, eng] 41-2495
- Cryogenic structure of linear weathering crusts in the Stanovoi Range. Miklaev, S.M., et al, [1986, p.74-78, rus] 41-2822
- Headwall weathering zones, Boundary Glacier, Canada. Gardner, J.S., [1987, p.60-67, eng] 41-3597
- Role of gas-liquid inclusions in cryogenic shattering of quartz. Rogov, V.V., [1987, p.81-85, rus] 41-4169
- New information on rock streams. Shvetsov, P.F., et al, [1983, p.103-105, rus] 41-4485
- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., [1986, p.122-167, rus] 41-4502

**Frozen cargo**

- Automation and powering of loading-unloading equipment. Sobkalov, I.P., et al. [1986, 128p., rus] **41-2227**
- Artificial freezing of cohesive soils for preventing adhesion. Mochalov, V.I., et al. [1986, p.15-17, rus] **41-3768**
- Mining technology designed for saving mineral resources. Altshuler, V.M., ed. [1987, 94p., rus] **41-4558**
- Methods of transporting damaged refrozen ore masses. Eremin, G.M., [1987, p.41-44, rus] **41-4559**

**Frozen fines**

- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] **41-3249**
- Rational utilization and preservation of ground water in the Buryat ASSR. Rezanov, I.N., ed. [1986, 114p., rus] **41-3330**
- Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR. Adushinov, A.A., [1986, p.52-59, rus] **41-3331**
- Phase composition of moisture in freezing disperse rocks. Danielian, I.U.S., et al. [1986, p.52-59, rus] **41-3395**
- Predicting the erosion of perennally frozen fines. Malinovskii, D.V., [1987, p.1338-1344, eng] **41-3397**
- Dislocations and permafrost development in the Pleistocene deposits of northern USSR. Popov, A.I., [1986, p.146-153, rus] **41-3429**
- Changes in physical and mechanical properties of frozen ground used as construction material. Liapin, V.E., et al. [1986, p.30-34, rus] **41-3443**
- Solution of the self-simulating problem of heat and moisture transfer during freezing of disperse soils. Iamitskii, P.A., [1987, p.1338-1344, eng] **41-4163**
- Experience in studying thermal properties of ground. Zaitsev, V.S., [1986, p.115-118, rus] **41-4466**
- Development of ice-vein pseudomorphs in the Russian plain. Minervin, A.V., et al. [1986, p.90-100, rus] **41-4469**
- Improving the reliability of 204M excavators under northern conditions. Osipova, T.V., et al. [1986, p.11-16, rus] **41-4525**
- Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams. Mironov, V.P., et al. [1986, p.3-7, rus] **41-4547**
- Reciprocal influence of underground and open mining under permafrost conditions. Los', I.N., [1986, p.33-37, rus] **41-4553**

**Frozen ground**

- Unique frost thawers. Hale, D., [1986, p.31-32, eng] **41-175**
- Snow management practices for increasing soil water reserves in frozen prairie soils. Gray, D.M., et al. [1985, p.256-263, eng] **41-452**
- Alaska's mineral industry, 1985. Bundtzen, T.K., et al. [1986, 68p., eng] **41-569**
- Winter highway construction. Bennett, F.L., [1986, p.32-46, eng] **41-642**
- Flexural behavior of frozen soil. Soo, S., et al. [1986, p.355-361, eng] **41-1161**
- Studies of frozen ground excavation equipment. Iarkin, A.A., ed. [1978, 87p., rus] **41-1310**
- Thermoerosion of frozen sediment under wave action. Kobayashi, N., et al. [1986, p.140-158, eng] **41-2016**
- Solubility of ice in frozen ground induced by salt solutions. Galdaenko, E.I., [1986, p.32-36, rus] **41-2150**
- Point probability distributions of frozen soil. Zuzel, J.F., et al. [1986, p.1681-1686, eng] **41-2501**
- Drilling complex BTSE-600 for rocks and frozen ground. Bryzhko, S.A., et al. [1986, p.4, rus] **41-2790**
- Organizing construction of the Kureyskaya hydroelectric power plant. Zaltsman, O.M., et al. [1986, p.17-23, rus] **41-2864**
- Earthwork organization for construction of Kureyskaya power plant dams. Balianikov, G.G., et al. [1986, p.45-49, rus] **41-2868**
- Blasting work in ground and rocks. Kucheriavt, F.I., ed. [1986, 128p., rus] **41-2903**
- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] **41-2968**
- Different domains of application of cold. Manual. Bykov, A.V., ed. [1985, 271p. (Pertinent p.: 42-66, 99-125, 222-260), rus] **41-3154**
- Forecasting ground temperature during adfreezing of piles. Pylaev, E.L., et al. [1987, p.73-75, rus] **41-3269**
- Using frozen ground in dam construction in permafrost areas. Kuznetsov, G.I., et al. [1986, p.128-141, rus] **41-3456**
- Experimental methods of determining water permeability of frozen soils. Lavrov, S.A., [1986, p.56-62, rus] **41-3588**
- Formation of loads on underground structures in thawing disperse ground. Sokolov, M., [1986, p.24-25, rus] **41-3735**
- Multivariate regression analysis of the process of frozen peat dehydration. Aleksandrov, B.M., [1986, p.15-19, rus] **41-3766**

**See also: Geocryology; Soil freezing****Frozen ground chemistry**

- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] **41-3249**

**Frozen ground expansion**

- Ice wedge growth at Illisavik experimental drained lake site. Mackay, J.R., [1986, p.1782-1795, eng] **41-2963**

**Frozen ground mechanics**

- Nature of origin of earth hummocks. Breisterdalen, Jotunheimen/Norway. Bolster, S.J.S., [1985, p.94-115, eng] **41-586**
- Growth mechanisms in aggradation palsas. Outcalt, S.I., et al. [1984, p.65-78, eng] **41-626**
- Dynamic properties of frozen granular soils. Li, J.C.-C., [1979, 335p., eng] **41-897**
- Mechanical properties and behaviour of frozen soils. Youssef, H., [1986, p.299-322, eng] **41-1103**
- Internal stresses in frozen ground: Discussion. Konrad, J.M., [1986, p.408-410, eng] **41-1162**
- Laboratory creep tests of frozen gravels. Huang, S.L., et al. [1986, p.101-104, eng] **41-1309**
- Frost-heave forces acting on the foundation base. Xu, Z., [1986, p.255-260, chi] **41-1426**
- Discussion on crevasse in frozen earth. Pang, G., [1986, p.287-290, chi] **41-1432**
- Engineering creep models for frozen soil behaviour. Berggren, A.-L., [1983, 357p., eng] **41-2014**
- Creep of soils. Pusch, R., [1979, 74p., eng] **41-2230**
- Effect of hydrostatic stress on creep of a frozen sand. Domaschuk, L., et al. [1987, p.119-124, eng] **41-2412**
- Creep behaviour of undisturbed clay permafrost. Savigny, K.W., et al. [1986, p.515-527, eng] **41-2471**
- Modeling of marine fiber reinforced concrete and frozen soil. Gopal, R.K., [1986, 155p., eng] **41-2587**
- Analysis of frozen sand beams. Wen, R.K., et al. [1983, p.790-793, eng] **41-2687**
- Temperature and time effects on the closure of a gravel room in permafrost. Huang, S.L., [1985, p.53-65, eng] **41-2743**
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] **41-3249**
- Thermodynamics and mechanics of freezing soil around a pipeline. Patterson, D.E., et al. [1986, 111p., eng] **41-3364**
- Feasibility study for stresses in a pipeline buried in freezing soil [1982, 29p., eng] **41-3505**
- Experimental studies on reducing methods of uplift force to a steel pipe. Fukuda, M., et al. [1986, p.109-120, jpn] **41-3884**
- Frost heave in permafrost. Mackay, J.R., et al. [1987, p.37-41, eng] **41-4008**
- Thermally induced heave beneath chilled pipelines in frozen ground. Nixon, J.F., [1987, p.260-266, eng] **41-4055**
- Finite element method for analysis of frozen earth structures. Soo, S., et al. [1987, p.121-129, eng] **41-4489**
- Frozen ground physics**
- Factors controlling ground frost on an aspa mire in Kuusamo, Finland. Koutaniemi, L., et al. [1986, p.60-67, fin] **41-187**
- Pipeline frost heave predictions using a 2-D thermal model. Nixon, J.F., [1986, p.67-82, eng] **41-644**
- Modeling of marine fiber reinforced concrete and frozen soil. Reddy, D.V., et al. [1985, p.845-856, eng] **41-670**
- Bond and slip of steel bars in frozen sand. Alwahhab, R.M., [1983, 361p., eng] **41-898**
- Internal stresses in frozen ground: Discussion. Konrad, J.M., [1986, p.408-410, eng] **41-1162**
- Ground water flow in frozen ground. Makowski, E., [1986, 292p., ger] **41-2229**
- Heat and moisture transfer in a partly frozen nonheaving soil. Kung, S.K.J., et al. [1986, p.1114-1122, eng] **41-2474**
- Calculated relations among indices of hydrophysical properties of frozen soils. Shelkin, I.V., [1986, p.151-156, rus] **41-2834**
- Seismo-acoustic studies of frozen and thawed calcareous clays. Voronkov, O.K., et al. [1985, p.88-95, rus] **41-3129**
- Investigation of moisture movements and stresses in frozen soils. Williams, P.J., et al. [1982, 46p., eng] **41-3499**
- Water content, solutes and temperature in a partially frozen soil. Mizoguchi, M., et al. [1986, p.11-17, jpn] **41-3750**
- Frozen tailings pond dams. LaFlèche, P.T., et al. [1987, p.191-197, eng] **41-4012**
- Determining the thermal conductivity coefficient for thawed and frozen grounds. Danielian, I.U.S., et al. [1983, p.20-24, rus] **41-4483**
- Frozen ground settling**
- Collapsed glacial topography at Adams Inlet, Alaska. McKenzie, G.D., et al. [1987, p.55-59, eng] **41-3596**
- Buried Arctic pipelines subjected to thaw settlement. Workman, G.H., [1987, p.131-138, eng] **41-4634**
- Frozen ground strength**
- Effects of freeze thaw cycles on granular soils for pavements. Cole, D., et al. [1986, 70p., eng] **41-593**
- Studies of plain and reinforced frozen soil structures. Soo, S., [1984, 299p., eng] **41-984**
- Determination of pore ice stresses in frozen soils. Youssef, H., [1986, p.262-282, eng] **41-1101**
- Mechanical properties and behaviour of frozen soils. Youssef, H., [1986, p.299-322, eng] **41-1103**

**Problems of technical tribology in Arctic service**

- conditions. Cherskii, I.N., et al. [1986, p.779-792, eng] **41-1132**
- Transportation of heavy modules to the Arctic. Kirkeide, K.L., et al. [1986, p.1160-1168, eng] **41-1151**
- Physical methods of studying material used in railroad technology. Vereshchagin, I.K., ed. [1982, 135p., rus] **41-1273**
- Electrical impulse method of determining the strength of frozen ground and ice. Kytin, I.U.A., [1982, p.108-113, rus] **41-1275**
- Calculating frozen ground resistance to excavation. Shlotdo, G.A., et al. [1978, p.20-25, rus] **41-1314**
- Plotting a theoretical diagram of loads on cutting tools. Zakharov, V.A., [1978, p.29-30, rus] **41-1315**
- Determining loads on multi-blade milling tools. Zakharov, V.A., [1978, p.30-36, rus] **41-1316**
- Determining servomechanism parameters of drop-wedge percussive machines. Aranzon, M.I., et al. [1978, p.36-41, rus] **41-1317**
- Energy distribution of drop-wedge percussive machines with servomechanism. Aranzon, M.I., [1978, p.41-47, rus] **41-1318**
- Studying the influence of cutting speed and cutting-tool parameters on frozen ground excavation. Sokolov, L.K., [1978, p.53-55, rus] **41-1321**
- Frozen ground excavation by trenching machines. Sokolov, L.K., [1978, p.57-63, rus] **41-1322**
- Blasting-mechanical method of excavating frozen ground. Rzhetskiy, V.A., et al. [1986, p.16-18, rus] **41-1526**
- Report of activities, 1984-1985. [1986, 21p., eng] **41-1678**
- Engineering creep models for frozen soil behaviour. Berggren, A.-L., [1983, 357p., eng] **41-2014**
- Ultimate design of foundations for permafrost bases. Pichavolt, G.P., [1986, p.218-223, rus] **41-2104**
- Subgrades and pavements in permafrost. Zhu, X., [1986, p.1-10, eng] **41-2197**
- Resistance of frozen ground to steady cone or pile penetration. Huneault, P., et al. [1987, p.125-132, eng] **41-2413**
- Some developments in shaped charge technology. Mellor, M., [1986, p.575-604, eng] **41-2678**
- Classification and laboratory testing of artificial frozen ground. Sayles, F.H., et al. [1987, p.22-48, eng] **41-2766**
- Some developments in shaped charge technology. Mellor, M., [1986, 29p., eng] **41-3049**
- Thermodynamics and mechanics of freezing soil around a pipeline. Patterson, D.E., et al. [1986, 111p., eng] **41-3364**
- Temperature and time dependence of frozen ground strength. Kononov, A.A., [1986, p.74-84, rus] **41-3396**
- Changes in physical and mechanical properties of frozen ground used as construction material. Liapin, V.E., et al. [1986, p.30-34, rus] **41-3443**
- Using frozen ground in dam construction in permafrost areas. Kuznetsov, G.I., et al. [1986, p.128-141, rus] **41-3456**
- Classifying frozen ground according to abrasion power. Leshchiner, V.B., et al. [1982, p.8-14, rus] **41-3545**
- Using tractor rippers on frozen grounds. Belikov, I.U.I., et al. [1982, p.40-46, rus] **41-3546**
- Integrated mechanization of earthwork. Degtiarev, A.P., et al. [1987, 335p. (Pertinent p.284-318), rus] **41-3674**
- Construction of the Novosibirsk valley under severe climatic conditions. Romanov, V., et al. [1986, p.7-9, rus] **41-3738**
- Discussion of "Repeated load triaxial testing of frozen and thawed soil". Youssef, H., [1986, p.221-225, eng] **41-3782**
- Developing and standardizing methods of determining the structural properties of frozen grounds. Sadovskii, A.V., et al. [1983, p.19-21, rus] **41-4482**
- Drilling bits for hard rocks. Kosobrodov, I.U.A., et al. [1986, p.61-65, rus] **41-4499**
- Frozen ground temperature**
- Heat transfer between concrete power line supports and permafrost. Tsukanov, N.A., et al. [1985, p.21-32, rus] **41-1543**
- Drill bits for frozen fine-grained soils. Sellmann, P.V., et al. [1986, 33p., eng] **41-2610**
- Transport of water in frozen soil 6. Effects of temperature. Nakano, Y., et al. [1987, p.44-50, eng] **41-3019**
- Using frozen ground in dam construction in permafrost areas. Kuznetsov, G.I., et al. [1986, p.128-141, rus] **41-3456**
- Water content, solutes and temperature in a partially frozen soil. Mizoguchi, M., et al. [1986, p.11-17, jpn] **41-3750**
- Thermal break-up of frozen cohesive rocks. Mochalov, V.I., et al. [1986, p.68-69, rus] **41-3763**
- Computation of maximum permafrost temperatures in beds beneath buildings. Kononov, A.A., [1986, p.192-197, eng] **41-4366**
- Experience in studying thermal properties of ground. Zaitsev, V.S., [1986, p.115-118, rus] **41-4466**
- Outward flow of vapour from frozen soils at Mayo, Yukon, Canada: results and interpretation. Smith, M.W., et al. [1987, p.143-152, eng] **41-4491**

- Frozen ground thermodynamics**  
Heat distribution research. Petteplace, G., [1986, p.2-3, eng] 41-407  
Impulse method of describing non-equilibrium cryogenic physical-geological processes. Koval'kov, V.P., [1986, p.101-115, rus] 41-603  
Thermal behavior of a cryogenic storage pilot station. Cames-Pintaux, A.M., et al, [1986, p.105-114, eng] 41-1281  
Model of heat and soil-water flow coupled by soil-water phase change. Hromadka, T.V., II, [1987, 124p, eng] 41-1568  
Thermal properties of soils. Farouki, O.T., [1986, 136p, eng] 41-2973  
Thermodynamics and mechanics of freezing soil around a pipeline. Patterson, D.E., et al, [1986, 111p, eng] 41-3364  
Investigation of moisture movements and stresses in frozen soils. Williams, P.J., et al, [1982, 134p. + append., eng] 41-3500  
Outward flux of vapour from frozen soils at Mayo, Yukon, Canada: results and interpretation. Smith, M.W., et al, [1987, p.143-152, eng] 41-4491
- Frozen lakes**  
Crystallography of Patterned Lake, Framnes Mountains. Chambers, J.L.C., et al, [1986, p.520-526, eng] 41-4307  
See also: Icebound lakes
- Frozen liquids**  
Frozen solution proton ENDOR spectra. Attanasio, D., [1986, p.4952-4957, eng] 41-2106  
Mössbauer spectroscopy of frozen aqueous solution of Fe(CIO<sub>4</sub>)<sub>2</sub>. Domes, H., et al, [1986, p.7294-7300, eng] 41-2108  
Antifreeze glycoproteins from polar fish blood. Feeney, R.E., et al, [1986, p.59-78, eng] 41-3165
- Frozen rivers**  
See: Icebound rivers
- Frozen rock strength**  
Hydropneumatic hammers of EO-2621 excavators for frozen ground. Karnaukhov, A.V., et al, [1978, p.74-78, rus] 41-1325  
On the least resistance line of curvilinear blow-out charges detonated in permafrost. Afanas'ev, E.M., et al, [1986, p.61-66, rus] 41-2906  
Prospects and problems of hydraulic power construction in the North. Biiarov, G.F., et al, [1986, p.5-12, rus] 41-3440  
Engineering and geological conditions of construction and operation of hydraulic structures built on perennially frozen hard rocks. Kagan, A.A., et al, [1986, p.34-44, rus] 41-3444  
Thermal break-up of frozen cohesive rocks. Mochalov, V.I., et al, [1986, p.68-69, rus] 41-3765  
Drilling instruments made of extra-hard materials. Collection of scientific papers. Vovchanovskii, I.F., ed, [1986, 87p., rus] 41-4498
- Frozen rock temperature**  
Cryolithozone of central Asia. Gorbunov, A.P., [1986, 57p., rus] 41-2349  
Freeze thaw simulations on quartz-micaschist on Signy Island. Hall, K., [1986, p.19-30, eng] 41-2359  
Studying heat and mass transfer in frozen ground around thermopiles. Nesterov, I.I., et al, [1986, p.1127-1130, rus] 41-2537  
Geocryological studies of the Pur-Nadym interfluvial, NW Siberia. Podbornyi, E.E., et al, [1986, p.95-100, rus] 41-2538  
Dynamics of ice-rock barriers under conditions of freezing of filtering rocks. Chugunov, V.A., et al, [1987, p.981-986, eng] 41-3242  
Development of ice-wedge polygon formations. Romanovskii, N.N., [1972, p.33-41, rus] 41-3747  
Concrete lining of tunnels. Belkin, M.N., et al, [1987, p.63-67, rus] 41-3809  
Practical suggestions for calculating soil temperature regime (current awareness material). Fel'dman, G.M., [1985, 69p., rus] 41-4611
- Frozen rocks**  
Model for rock fracture during freezing at Signy Island. Hall, K., [1986, p.53-60, eng] 41-801  
Physical basis of frost weathering. Walder, J.S., et al, [1986, p.27-32, eng] 41-1185  
Freeze-thaw of pore moisture in sandy rocks. Medvedskii, R.I., [1986, p.543-549, eng] 41-1894  
Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] 41-3249  
Evaluating slope stability at different temperature regimes. Ukhov, S.B., et al, [1986, p.106-113, rus] 41-3453  
Frost action in rocks. Hare, M.J., [1985, 168p., eng] 41-3646  
Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, [1987, 166p., rus] 41-3649  
Improvement of parameters and increase in the reliability of mining machines. Ponomarenko, I.U.F., ed, [1986, 82p., rus] 41-4524
- Frozen soil**  
See: Frozen ground
- Fuel transport**  
Unloading of a large tanker near Mirnyy Station. Kozlovskii, A.M., et al, [1986, p.115-119, rus] 41-1267
- Fuels**  
Development of power engineering in the Yakut ASSR related to the Baykal Amur Railroad construction. Collection of scientific papers. Petrov, N.A., ed, [1985, 101p., rus] 41-1925  
Research and development in the Division of Mechanical Engineering, 1955. [1986, 89p., eng] 41-2575
- Fungi**  
*Lamprospora miniopsis* Spooner, a bryophilous discomycete from Bouvetøya. Schumacher, T., [1986, p.61-64, eng] 41-921  
Decomposition of wood litter on felled areas of the North. Kozlovskaya, L.S., et al, [1986, p.92-107, rus] 41-2378  
Microbiology of human pollution at Showa Station. Toyoda, S., et al, [1985, p.541-546, jpn] 41-3568  
Snow depth and incidence of a snowmold disease on mountain big sagebrush. Sturges, D.L., et al, [1986, p.215-221, eng] 41-3571  
Biologic activity of forest soils. Korsunov, V.M., ed, [1985, 122p., rus] 41-4109  
Microflora in forest soils of the Lower Angara depression. Vishniakova, Z.V., et al, [1985, p.88-101, rus] 41-4112
- Gamma irradiation**  
Independent measurement of snow water equivalent and soil moisture using gamma spectral attenuation. Vadnais, K.G., [1984, p.116-125, eng] 41-1952  
Snow water equivalent from satellite data and spectrometry. Kuittinen, R., [1986, p.181-189, eng] 41-3896
- Gas inclusions**  
Review of the history of atmospheric CO<sub>2</sub> recorded in ice cores. Oeschger, H., et al, [1986, p.89-108, eng] 41-2221  
Ice cores tell composition of ancient atmospheres. Stauffer, B., [1985, p.72-73, eng] 41-2632  
Amorphous water ice and its ability to trap gases. Bar-Nun, A., et al, [1987, p.2427-2435, eng] 41-3575
- Gas liquefaction**  
See: Liquefied gases
- Gas pipelines**  
Design methods for gas/condensate pipelines in cold environments. Hein, M.A., et al, [1986, p.143-151, eng] 41-79  
Quill Creek test facility. Fielder, D.E., [1986, p.86-115, eng] 41-2517  
Classification of means of ballasting and fastening pipelines. Vasil'ev, N.P., et al, [1986, p.20-21, rus] 41-2782  
Scientific-technical preparation for economic development of Yamal Peninsula. [1987, p.31-34, rus] 41-2784  
Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] 41-2962  
Permafrost control beneath gas pipelines. Nikonenko, I.S., et al, [1986, p.14-16, rus] 41-3206  
Evaluating the state of gas pipelines from space photographs. Arceva, E.M., et al, [1986, p.27-29, rus] 41-3212  
Operation of power equipment of gas pipelines in western Siberia. Ivanov, V.A., et al, [1987, 143p., rus] 41-3687  
All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] 41-3974  
Interactions between "cold" gas pipelines and freezing ground. Mironov, N.G., et al, [1986, p.42-43, rus] 41-3976
- Gas production**  
Polar gas project: structural design aspects. Workman, G.H., [1986, p.116-125, eng] 41-2518  
Oil and gas fields in the East Coast and Arctic basins of Canada. Mency, R.A., [1986, p.143-176, eng] 41-2608  
Helium-3 balance of the upper layers of the northwest Weddell Sea. Schlosser, P., et al, [1987, p.365-377, eng] 41-4602
- Gas wells**  
Geocryological studies of the Pur-Nadym interfluvial, NW Siberia. Podbornyi, E.E., et al, [1986, p.95-100, rus] 41-2538  
Calculation of hydrate formation in gas wells drilled in permafrost. Malyshev, A.G., et al, [1986, p.21-23, rus] 41-3772
- Gases**  
Interaction between cryolithozone and natural gases of the underground hydrosphere. Romanovskii, N.N., [1986, p.3-17, rus] 41-2543  
Methane flux from northern peatlands. Harris, R.C., et al, [1985, p.652-654, eng] 41-2744  
See also: Carbon dioxide; Liquefied gases; Natural gas; Oxygen; Solidified gases
- Geobotanical interpretation**  
Subdivision of the Bani zone according to vegetational cover. Belov, A.V., ed, [1985, 181p., rus] 41-252  
Errors in geological interpretation of space images. Kuzin, I.L., [1984, p.436-442, eng] 41-820
- Geological interpretation of space images of covered areas.** Aitakov, V.I., [1984, p.443-451, eng] 41-821  
Landscape indication methods of interpretation used in forest tundra surveys. Kiuntsef, V.V., [1986, p.118-121, rus] 41-1539  
Methods of forest interpretation on texture-selective images. Kravtsova, V.I., [1986, p.55-66, rus] 41-2304  
Using satellites in mapping West Siberian forests. Gorozhankina, S.M., et al, [1986, p.34-43, rus] 41-3515  
Using spaceborne photography data in studying forests and swamps. Gorozhankina, S.M., [1986, p.169-189, rus] 41-3973  
Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, [1984, 193p., rus] 41-4086  
Hydromeliorative regionalization of West Siberia from space photographs. Gorozhankina, S.M., [1984, p.16-25, rus] 41-4087  
Use of map parameters to examine cumulative impacts in Prudhoe Bay Oilfield. Walker, D.A., et al, [1986, p.149-160, eng] 41-4139  
Vegetation of Beechey Point, Alaska. Walker, D.A., et al, [1987, 63p., eng] 41-4367  
Studies of migration frost mounds with the use of multiband aerial photographs. Gromova, E.I., [1983, p.142-150, rus] 41-4612
- Geochemistry**  
Improving the efficiency of geochemical exploration methods in taiga (8th Session of the Siberian branch of SGPM) summaries of reports. [1986, 240p., rus] 41-197  
Strategy of geochemical exploration in the taiga zone. Tauson, L.V., [1986, p.10-14, rus] 41-198  
Biogeochemical exploration for mineral deposits in forest lands and taiga. Kovalevskii, A.L., [1986, p.32-37, rus] 41-199  
Geochemical exploration in economically developing parts of taiga. Zagoskin, V.A., et al, [1986, p.145-148, rus] 41-200  
Geochemical exploration in the northern taiga permafrost areas. Makarov, V.N., [1986, p.158-159, rus] 41-201  
Biochemical indications of gold-ore deposits in permafrost. Ursova, O.A., [1986, p.226-227, rus] 41-202  
Late Pleistocene sedimentation processes on the antarctic continental shelf. Grobe, H., [1986, 121p. + figs., ger] 41-267  
Trace elements in the Greenland Ice Cap melt zone. Chevallier, P., et al, [1987, p.E649-E656, eng] 41-2728  
Biochemical anomalies in permafrost zone and their interpretation. Lobanova, A.B., [1987, p.170-172, eng] 41-3163  
Sulphide in subglacial exploration, St. Elias Mts., B.C. Day, S.J., et al, [1987, p.723-730, eng] 41-4080
- Geochronology**  
Reinterpretation of glaciovolcanic interactions in Marie Byrd Land. McIntosh, W.C., et al, [1985, p.57-59, eng] 41-2624
- Geocryology**  
Climate and vegetation of Primor'e as affected by Pleistocene glaciation. Shumova, G.M., et al, [1986, p.157-161, rus] 41-126  
Subdivision of the Bani zone according to vegetational cover. Belov, A.V., ed, [1985, 181p., rus] 41-252  
One hundred years of genetic pedology. Kovda, V.A., ed, [1986, 276p., rus] 41-521  
Recent cryological problems of the Dokuchaev pedology. Makeev, O.V., et al, [1986, p.118-125, rus] 41-522  
Methods of geomorphological field experiments in the USSR. Dedkov, A.P., ed, [1986, 160p., rus] 41-1197  
Slow hydrothermal movements of soil and ground masses on slopes (creep). Dedkov, A.P., et al, [1986, p.77-90, rus] 41-1198  
Methods of studying cryogenic relief-forming processes at research stations. Zhigarev, L.A., et al, [1986, p.111-119, rus] 41-1199  
Studying cryogenic processes at research institutes. Ivanovskii, L.N., et al, [1986, p.136-149, rus] 41-1202  
Application of space imagery to geocryologic mapping. Nekrasov, I.A., et al, [1985, p.187-195, eng] 41-1445  
Application of (14)C dating to the studies of glacial geology and geocryology. Gu, G., et al, [1986, p.159-165, chi] 41-1463  
Supplying engineering and geological data on mass construction objects. Khalim, N.M., et al, [1986, p.37-49, rus] 41-1537  
Quaternary glaciations of Central Siberia. Velichko, A.A., ed, [1986, 121p., rus] 41-1906  
Geocryological research. Ershov, E.D., ed, [1986, 224p., rus] 41-2080  
Geocryology—its subject and problems. Danilov, I.D., [1986, p.18-26, rus] 41-2082  
Determining the scope of engineering-geological research in permafrost regions. Khristalev, L.N., [1986, p.27-38, rus] 41-2083  
Geocryological mapping for regional surveying and design research. Garagulia, L.S., et al, [1986, p.38-45, rus] 41-2084

**Geocryology (cont.)**

- Publication of map and monograph on geocryology of the USSR. Ershov, E.D., et al, [1986, p.212-217, rus] **41-2103**
- Classification of exogenic relief-forming processes on land. Vyrkin, V.B., [1986, p.20-24, rus] **41-2247**
- Cryolithozone of central Asia. Gorbunov, A.P., [1986, 57p., rus] **41-2349**
- Mineralogy and morphology of disperse morainal debris on King George and Nelson islands. Konishchev, V.N., et al, [1984, p.104-110, rus] **41-2358**
- Engineering-geological evaluation of railroad construction areas. Marakhtanov, V.P., [1986, p.12-13, rus] **41-2791**
- Topographic analysis of the lower Kolyma River for cryolithologic mapping. Kaplina, T.N., et al, [1986, p.51-60, rus] **41-2819**
- Regional regularities governing long-range freeze-thaw of ground. Kuznetsova, I.L., et al, [1986, p.176-183, rus] **41-2838**
- Physical geocryology. Shvetaov, P.F., et al, [1986, 177p., rus] **41-2885**
- Structure and scientific trends in cryopedology. Ershov, E.D., [1985, p.46-55, eng] **41-2969**
- Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, [1987, 144p., rus] **41-2983**
- Changes in the active layer with changes in forest cover in Yakutia. Stashenko, A.I., [1986, p.194-199, eng] **41-3199**
- Geocryology of the Schirmacher Hills. Vtiurin, B.I., [1986, p.200-212, eng] **41-3200**
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] **41-3270**
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] **41-3433**
- Prospects and problems of hydraulic power construction in the North. Biiarov, G.F., et al, [1986, p.5-12, rus] **41-3440**
- Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000. Kudoiarov, L.I., [1986, p.13-23, rus] **41-3441**
- Possibilities of landscape indication in engineering-geological surveys of southern Central Yakutia. Gravis, G.F., et al, [1986, p.85-96, rus] **41-3489**
- Possibility of using the transient processes sounding method in geocryological mapping. Nim, I.U.A., et al, [1986, p.144-153, rus] **41-3495**
- Use of satellite information in geocryological surveys for landscape regionalization. Shteinbrener, A.F., et al, [1986, p.49-54, rus] **41-3517**
- Satellite methods of studying naleds. Abakumenko, A.E., [1986, p.94-99, rus] **41-3521**
- Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1986, 259p., rus] **41-3534**
- Isotope composition of ground ice on the Yamal Peninsula. Krutauk, L.N., et al, [1985, p.142-143, rus] **41-3537**
- Gelifluction lobe at Jotunheimen, Norway. Matthews, J.A., et al, [1986, p.345-360, eng] **41-3565**
- Definition of fossil periglacial zones and periglacial phenomena. Brochu, M., [1986, p.27-30, fre] **41-3578**
- Geocryogenic regions of the Andes in Argentina. Corte, A.E., [1986, p.31-34, eng] **41-3579**
- Climatic reconstructions from geocryological data. Danilov, I.D., et al, [1986, p.303-308, eng] **41-3621**
- Some current problems in geocryology. Vtiurin, B.I., et al, [1972, p.17-25, rus] **41-3746**
- Development of ice-wedge polygon formations. Romanovskii, N.N., [1972, p.33-41, rus] **41-3747**
- New information on rock streams. Shvetaov, P.F., et al, [1983, p.103-105, rus] **41-4485**
- Signs of "semiarid" pediplanation on Mars. Polosukhin, V.P., [1987, p.79-85, rus] **41-4497**
- Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., [1986, 78p., rus] **41-4523**
- Geodetic surveys**
- Glacio-geophysical implications of NNSS positioning at Showa Station. Shibuya, K., [1986, p.327-346, eng] **41-2212**
- Regionalization of the Yakut ASSR for determining depths of placing geodetic markers. Bogdanov, B.G., [1986, p.30-31, rus] **41-3213**
- Geography**
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] **41-2289**
- Physical geocryology. Shvetaov, P.F., et al, [1986, 177p., rus] **41-2885**
- Modeling of processes in landscape-geochemical systems. Sysuev, V.V., [1986, 301p., rus] **41-3512**
- See also: Biogeography
- Geologic processes**
- Icy satellites, rings and Pluto. Klinger, J., [1985, p.621-629, eng] **41-1727**
- Glaciation and the evolution of the Canadian high arctic landscape. England, J., [1987, p.419-424, eng] **41-3319**
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, [1987, 166p., rus] **41-3649**
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, [1987, p.4-65, rus] **41-3650**
- Geologic structures**
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] **41-571**
- Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., [1986, 224p., rus] **41-1748**
- Geological maps**
- Maximum southward advance of the Kara center ice sheet. Diatlova, I.N., [1986, p.154-157, rus] **41-125**
- Allowing for the most recent tectonics in geocryological mapping of western Siberia. Belopukhova, E.B., et al, [1986, p.67-78, rus] **41-3487**
- Possibility of using the transient processes sounding method in geocryological mapping. Nim, I.U.A., et al, [1986, p.144-153, rus] **41-3495**
- Geological surveys**
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] **41-571**
- Geologic field studies of the Miki Fjord area, East Greenland. Bird, D.K., et al, [1985, p.219-235, eng] **41-872**
- Use of spectral-correlation analysis in preliminary stages of investigations. Petrova, A.A., [1978, p.93-98, rus] **41-1000**
- Exploration and economic evaluation of petroleum deposits in subarctic regions. Diachkova, E.A., [1987, 108p., rus] **41-2961**
- Geologic studies in Alaska by the U.S. Geological Survey during 1986. Hamilton, T.D., ed, [1987, 195p., eng] **41-3466**
- Wright Glacier volcanic plug and dike swarm, southeastern Alaska. Ford, A.B., et al, [1987, p.116-118, eng] **41-3467**
- Allowing for the most recent tectonics in geocryological mapping of western Siberia. Belopukhova, E.B., et al, [1986, p.67-78, rus] **41-3487**
- Use of satellite information in geocryological surveys for landscape regionalization. Shteinbrener, A.F., et al, [1986, p.49-54, rus] **41-3517**
- Geology**
- Nearshore sediments of eastern Baffin Island. Emory-Moore, M., [1986, 55p., eng] **41-245**
- Geologic studies in Alaska by the U.S. Geological Survey during 1985. Bartsch-Winkler, S., ed, [1986, 173p., eng] **41-664**
- Geologic report for the Beaufort Sea planning area, Alaska. Craig, J.D., et al, [1985, 192p. + maps, eng] **41-694**
- Geological literature of the Alaska Peninsula to 1985. Wilson, F.H., et al, [1986, 113p., eng] **41-957**
- Hydrology and land sciences from polar-orbiting satellite data. Matson, M., et al, [1985, 20p., eng] **41-976**
- Geology of icy satellites. McKinnon, W.B., [1985, p.829-856, eng] **41-1741**
- Physical geocryology. Shvetaov, P.F., et al, [1986, 177p., rus] **41-2885**
- Geologic materials from boreholes for the TACTP, Copper River, Alaska. Odum, J.K., et al, [1986, 18p., eng] **41-4106**
- See also: Engineering geology; Glacial geology; Hydrogeology; Marine geology
- Geomagnetism**
- Geophysical fieldwork on the Ronne Ice Shelf. Herrod, L.D.B., et al, [1986, p.9-14, eng] **41-1786**
- Geomorphology**
- Glaciation of Nordenskiöld Land, W. Spitsbergen. Musial, A., [1985, p.497-513, eng] **41-74**
- Evolution of marginal zone of the Vitkovski Glacier (South Spitsbergen). Andrzejewski, L., et al, [1985, p.527-535, eng] **41-75**
- Slopes and talus of NW Greenland. Malaure, J., [1985, p.63-79, fre] **41-374**
- Types of evolution and slope dynamics in North Labrador. André, M.F., [1985, p.81-94, fre] **41-375**
- Numerical experiments on large-scale glacial erosion. Oerlemans, J., [1984, p.107-126, eng] **41-629**
- Cartographic methods for large-scale glacier maps. Yin, S., et al, [1986, p.192-195, eng] **41-768**
- Mesoclimatic characteristics of the Timan-Pechora Regional Economic Complex. Voevodova, Z.I., [1986, p.46-56, rus] **41-1168**
- Stratifying alpine tundra for geomorphic studies. Frank, T.D., et al, [1985, p.179-187, eng] **41-1228**
- Pingos of the Prudhoe Bay region, Alaska. Walker, D.A., et al, [1985, p.321-336, eng] **41-1251**
- Alpine debris fans in the Canadian Rocky Mountains. Sauchyn, D.J., [1986, p.191-217, eng] **41-1255**
- Northern regions cryoturbation, Onion Portage, Alaska. Schwegler, C., [1985, p.127-141, eng] **41-1358**
- Paleogeological traces and series of mutiglaciation in the Luojishan Mountain. Cui, Z., et al, [1986, p.107-118, ch] **41-1458**
- Eolian processes in glaciers, SW Spitsbergen. Kida, J., [1986, p.25-43, eng] **41-1550**
- Geomorphological evidence for ground ice on Mars. Lucchitta, B.K., [1985, p.583-604, eng] **41-1725**
- Some remarks on the geology of Ganymede. Bianchi, R., et al, [1985, p.767-779, eng] **41-1737**
- Present-day geomorphological processes on Prins Oscars Land, Svalbard. Rudberg, S., [1986, p.41-63, eng] **41-1845**
- Dating slope deposits and estimating rates of rock wall retreat in Northwest Spitsbergen by lichenometry. André, M.F., [1986, p.65-75, eng] **41-1846**
- Morphoclimatic aspects of periglacial features, northern Scandinavia. Svensson, H., [1986, p.123-130, eng] **41-1870**
- Nivation and local glaciation in N. and S. Sweden. A progress report. Rapp, A., et al, [1986, p.197-205, eng] **41-1878**
- Freeze thaw activity at snowpatch sites. Nyberg, R., [1986, p.207-211, eng] **41-1879**
- Pleistocene glaciations in East Asia. Bessaly, V.G., ed, [1984, 212p., rus] **41-1910**
- Neoglaciation in the Coast Mts., B.C., Canada. Ryder, J.M., et al, [1986, p.273-287, eng] **41-1928**
- Focus: permafrost geomorphology. French, H.M., ed, [1986, p.358-366, eng] **41-2075**
- Sea-floor morphology and sediments. Pelletier, B.R., [1986, p.143-162, eng] **41-2595**
- Slope stability: geotechnical engineering and geomorphology. Anderson, M.G., ed, [1987, 648p., eng] **41-3042**
- Push-moraines and glacier-contact fans in marine and terrestrial environments. Boulton, G.S., [1986, p.677-698, eng] **41-3072**
- Arctic landforms: the formative processes. Bird, J.B., [1987, p.75-79, eng] **41-3234**
- Pingo scars in Devès, Haute-Loire, France. Bout, P., [1986, p.17-26, fre] **41-3577**
- Geocryogenic regions of the Andes in Argentina. Corte, A.E., [1986, p.31-34, eng] **41-3579**
- Periglacial morphology of volcanic outcrops. Derruau, M., [1986, p.47-62, fre] **41-3580**
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, [1987, 166p., rus] **41-3649**
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, [1987, p.4-65, rus] **41-3650**
- Vegetation of the Angmagssalik District, SE Greenland. Daniels, F.J.A., [1982, 78p. + maps, eng] **41-3789**
- Glacial and iceberg effects on morphology off Wilkes Land. Barnes, P.W., [1987, p.175-194, eng] **41-4545**
- Geophysical surveys**
- Acoustic array sensor tracking system. Von der Heydt, K., et al, [1985, p.464-471, eng] **41-229**
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] **41-571**
- Geologic studies in Alaska by the U.S. Geological Survey during 1985. Bartsch-Winkler, S., ed, [1986, 173p., eng] **41-664**
- Mapping of the Nordaustlandet ice caps. Dowdeswell, J.A., et al, [1986, p.51-58, eng] **41-738**
- Geophysical exploration methods in the Arctic. Gaponenko, G.I., ed, [1978, 165p., rus] **41-998**
- Use of spectral-correlation analysis in preliminary stages of investigations. Petrova, A.A., [1978, p.93-98, rus] **41-1000**
- Ice-ocean modelling in the East Greenland area. Rasmussen, E.B., et al, [1986, p.380-398, eng] **41-1108**
- Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., [1986, 224p., rus] **41-1748**
- Geophysical fieldwork on the Ronne Ice Shelf. Herrod, L.D.B., et al, [1986, p.9-14, eng] **41-1786**
- Glaciogeophysical survey of the Ross Embayment, 1984-1985. Bentley, C.R., et al, [1985, p.63-64, eng] **41-2626**
- Geophysics of sea ice. [1986, 1196p., eng] **41-2985**
- Geophysics of sea ice: overview. Untersteiner, N., [1986, p.1-8, eng] **41-2986**
- Sea ice geophysical problems. Carsey, F.D., [1983, p.116-117, eng] **41-3348**
- Geophysical research for the construction of hydraulic structures in permafrost areas. Kondrashkin, A.V., et al, [1986, p.76-83, rus] **41-3449**
- Remote sounding and interpretation of cryo-hydro-geochemical anomalies. Makarov, V.N., et al, [1986, p.133-144, rus] **41-3494**
- Possibility of using the transient processes sounding method in geocryological mapping. Nim, I.U.A., et al, [1986, p.144-153, rus] **41-3495**
- Problems in automation of geophysical investigations. Collection of works. Deviat'skiy, A.S., ed, [1985, 162p., rus] **41-3543**
- Preparation of geophysical borehole site with ground ice, Fairbanks, AK. Delaney, A.J., [1987, 15p., eng] **41-3627**
- Computer-assisted techniques for sea ice data. Burns, B.A., et al, [1986, p.947-959, eng] **41-3990**
- Nimbus-7 microwave radiometry of ocean surface winds and sea ice. Rubinstein, I.G., et al, [1986, p.961-970, eng] **41-3991**
- Methodical and experimental bases of geothermy. Kropotkin, P.N., ed, [1983, 230p. (Pertinent p.79-84, 181-187), rus] **41-4614**
- Geothermometry**
- Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., [1986, 224p., rus] **41-1748**



- Methodical and experimental bases of geothermy.  
Kropotkin, P.N., ed. [1983, 230p. (Pertinent p.79-84, 181-187), rus] 41-4614
- Geothermy**
- Freezing front location in two-dimensional cold soils.  
Hromadka, T.V., II, et al. [1987, p.91-95, eng] 41-2407
- Permafrost and Quaternary history of the Mackenzie-Beaufort region. Judge, A.S., [1986, p.3-10, eng] 41-2508
- Thickness and temperature of permafrost in Kular Range.  
Sheshin, I.U.B., et al. [1986, p.47-50, rus] 41-2818
- Heat pipes to avoid freezing of highway bridge decks.  
Ferrara, A.A., et al. [1977, 5p., eng] 41-4604
- Methodical and experimental bases of geothermy.  
Kropotkin, P.N., ed. [1983, 230p. (Pertinent p.79-84, 181-187), rus] 41-4614
- Glacial deposits**
- Acid neutralizing capacity of glacial sediments in western Ungava. Wilson, H., et al. [1986, p.69-85, eng] 41-346
- Workshop on Alaskan Hydrology, Apr.1985. [1986, 106p. + 3 appends., eng] 41-471
- Glaciers and sediment. Bezing, A., et al. [1986, p.53-69, eng] 41-474
- Problems of studying sediment balance in coastal zones of seas. Shulskii, I.U.D., [1986, 240p., rus] 41-516
- Moraine ridge deposition on Bovergreen glacial foreland.  
Gallagher, J., [1985, p.61-73, eng] 41-585
- Effect of till rheology on the flow and profile of the Laurentide ice sheet, USA. Beget, J.E., [1986, p.235-241, eng] 41-684
- Mapping buried glacier ice, Monte Rosa, Italian Alps.  
Haeblerli, W., et al. [1986, p.78-81, eng] 41-743
- Supraglacial debris on the Khumbu Glacier, Nepal.  
Nakawo, M., et al. [1986, p.129-131, eng] 41-754
- Glacier mapping of rock glaciers, moraines and buried ice.  
Whalley, W.B., et al. [1986, p.181-183, eng] 41-766
- Glacier outlet of the Vatnajökull in the upper course of the Djupa, southern Iceland. Jakobs, K., [1984, p.97-103, ger] 41-805
- Glacial deposition including moraines, drumlins and eskers.  
Minion, R., comp. [1985, 98p., eng] 41-825
- Fine particle translocation in soils of glacial deposits.  
Locke, W.W., [1986, p.33-43, eng] 41-1186
- Sediments in a tidewater glacier, Baffin I., Canada.  
Dowdeswell, J.A., [1986, p.45-56, eng] 41-1187
- Moraine stratigraphy of Bugaboo Glacier, British Columbia. Osborn, G., [1986, p.171-178, eng] 41-1190
- Use of lacustrine sedimentary sequences as indicators of Holocene glacial history, Banff National Park, Alberta, Canada. Leonard, E.M., [1986, p.218-231, eng] 41-1191
- Late Quaternary moraines in the Chimborazo area, Ecuador. Clapperton, C.M., et al. [1985, p.135-142, eng] 41-1225
- Statistical interpretation of the fabric of a rock glacier.  
Giardino, J.R., et al. [1985, p.165-177, eng] 41-1227
- Late Quaternary glacial chronology for Baffin Island, NWT. Dowdeswell, J.A., [1984, p.311-320, eng] 41-1233
- Glacial dispersal train of Paleozoic erratics. Tippet, C.R., [1985, p.1818-1826, eng] 41-1242
- Development of the South Shetland Islands and the Antarctic Peninsula. Barsch, D., et al. [1986, p.211-218, eng] 41-1279
- Glacier mass balances in the Cajon del Rubio, Andes Centrales Argentinas. Leiva, J.C., et al. [1986, p.83-90, eng] 41-1307
- Where are the former glacial relics in Guitlin area. Shi, Y., et al. [1986, p.97-106, chi] 41-1457
- Eolian processes in glaciers, SW Spitsbergen. Kida, J., [1986, p.25-43, eng] 41-1550
- Limestone formation in periglacial and glacial areas.  
Chrobok, S.M., [1986, p.277-284, ger] 41-1565
- Chemical element balance in the end-moraine landscapes of southern taiga. Shitikova, T.E., [1985, p.104-113, rus] 41-1818
- Beach changes from retreating glacier ice in South Georgia. Gordon, J.E., et al. [1986, p.15-24, eng] 41-1844
- Glaciomarine facies in northern Ireland. McCabe, A.M., [1986, p.880-894, eng] 41-1862
- Potential effects of acid rain on glaciated terrain. Shilt, W.W., [1984, p.135-156, eng] 41-2117
- Hydrologic conditions Connors Bog area, Anchorage, Alaska. Glass, R.L., [1986, 23p., eng] 41-2196
- Mineralogy and morphology of disperse morainal debris on King George and Nelson islands. Konishchev, V.N., et al. [1984, p.104-110, rus] 41-2358
- Sedimentation at the foot of volcanoes in various climatic settings. Kuralenko, N.P., [1986, 111p., rus] 41-2363
- Bibliography on ground water in glacial-aquifer systems, U.S.A. Wiltshire, D.A., et al. [1986, 26p., eng] 41-2464
- Dating of the Little Ice Age glacier advance, SW Norway. Matthews, J.A., et al. [1986, p.369-375, eng] 41-2472
- Examples of studying landslide processes in Canada. Rechitakii, V.I., [1986, p.96-104, rus] 41-2548
- Investigations of Pleistocene glacial drift in the central Yukon. Smith, C.A.S., et al. [1986, p.29-37, eng] 41-2704
- Pinedale deglaciation and Holocene environmental changes, Lemhi Mountains. Butler, D.R., [1986, p.39-46, eng] 41-2705
- Holocene paleohydrology of the St. Elias Mountains, British Columbia and Yukon. Johnson, P.G., [1986, p.47-53, eng] 41-2706
- Observed processes of glacial deposition in Glacier Bay, Alaska. Anderson, P.J., ed. [1986, 167p., eng] 41-2974
- Predicting settlement at a damsite on a tunnel valley deposit in Alberta. McClung, J.E., et al. [1987, p.45-57, eng] 41-2978
- Glacio-fluvial sediment transfer. Gurnell, A.M., ed. [1987, 524p., eng] 41-3124
- Landforms and sediments produced by glaciers in Iceland. Sharp, M.J., [1982, 380p. + appends., eng] 41-3141
- Contribution to the study of sediments in the Bransfield Strait region. Silva Martins, L.R., et al. [1987, p.127-146, por] 41-3156
- Nitrogen of a moss ecosystem on glacial outwash sands, New Hampshire. Bowden, R.D., [1987, 149p., eng] 41-3346
- Cyclic swelling of clays. Osipov, V.I., et al. [1987, p.23-36, rus] 41-3399
- Moraine formation at Soler Glacier, Patagonia. Aniya, M., [1987, p.107-117, eng] 41-3835
- Recent retreat of Soler Glacier, Patagonia as seen from vegetation recovery. Sweda, T., [1987, p.119-124, eng] 41-3836
- Hydrometeorological regime and dynamics of Lake Isayk-Kul'. Pomortsev, O.A., ed. [1988, 153p., rus] 41-3870
- Significance of rock glaciers in the formation and development of lakes in the Tien Shan highlands. Tarakanov, A.G., [1985, p.137-145, rus] 41-3871
- Snow cover and dirt layer in the accumulation area of Yala Glacier, Nepal. Iida, H., et al. [1987, p.55-62, eng] 41-3916
- Formation of dirt layers and surface dust by micro-plants in Yala Glacier, Nepal. Kohshima, S., [1987, p.63-68, eng] 41-3917
- Modern glaciomarine environments. Powell, R.D., [1987, p.23-25, eng] 41-4097
- Origin of glacial raft: detachment, transport, deposition. Ruszczyńska-Szenajch, H., [1987, p.101-112, eng] 41-4100
- Geologic materials from boreholes for the TACTP, Copper River, Alaska. Odum, J.K., et al. [1986, 18p., eng] 41-4106
- Terrace scarp wind erosion in Arctic East Greenland. Swett, K., et al. [1987, p.45-52, eng] 41-4224
- Moraines and surface melt on glaciers. Rogerson, R.J., et al. [1986, p.350-354, eng] 41-4287
- Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., [1986, 78p., rus] 41-4523
- Glacial erosion**
- Waves on glacial beds. Mazo, V.L., [1986, p.20-26, rus] 41-101
- Pal'gov-Shumskii method of calculating bottom relief of glacier beds. Bulnitskii, A.B., et al. [1986, p.195-201, rus] 41-134
- Quaternary research (Selected papers of the 11th INQUA Congress). Kartashov, I.P., ed. [1986, 200p., rus] 41-549
- Mars: periglacial and glacial relief forms. Lucchitta, B.K., [1986, p.183-193, rus] 41-550
- Melting history of Antarctica during the past 60,000 years. Labeyrie, L.D., et al. [1986, p.701-706, eng] 41-616
- Numerical experiments on large-scale glacial erosion. Oerlemans, J., [1984, p.107-126, eng] 41-629
- Glacial geologic processes. Drewry, D., [1986, 276p., eng] 41-963
- Southeastward ice flow in central Quebec. Bouchard, M.A., et al. [1985, p.1536-1541, eng] 41-1239
- Glacial dispersal train of Paleozoic erratics. Tippet, C.R., [1985, p.1818-1826, eng] 41-1242
- Development of the South Shetland Islands and the Antarctic Peninsula. Barsch, D., et al. [1986, p.211-218, eng] 41-1279
- Mathematical model and forecasts of thermokarst evolution. Grigorian, S.S., et al. [1986, p.45-49, rus] 41-1636
- Glacial erosion in western Antarctica. Glazovskii, A.F., [1986, p.135-139, rus] 41-1655
- Effect of bedrock on environments of Spitsbergen glaciers. Drodowski, E., [1985, p.397-413, eng] 41-2192
- Self-organization of glacial relief. Mazo, V.L., [1986, p.309-312, rus] 41-2305
- Sedimentation at the foot of volcanoes in various climatic settings. Kuralenko, N.P., [1986, 111p., rus] 41-2363
- Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed. [1986, 165p., rus] 41-3428
- Dislocations and permafrost development in the Pleistocene deposits of northern USSR. Popov, A.I., [1986, p.146-153, rus] 41-3429
- Cryogenic factor in the evolution of landscape-geodynamic structures. Sadovskii, A.I., et al. [1986, p.153-165, rus] 41-3496
- Nival-glacial relief-forming processes in the BAM zone. Plastinin, L.A., et al. [1986, p.82-86, rus] 41-3519
- Headwall weathering zones, Boundary Glacier, Canada. Gardner, J.S., [1987, p.60-67, eng] 41-3597
- Relief and deposits of the Severnaya Zemlya islands. Makeev, V.M., et al. [1986, p.331-338, eng] 41-3625
- Lacustrine and river geosystems of the Oktyabr'skaya Revolyutsiya Islands (Severnaya Zemlya). Mordvinov, A.A., [1986, p.30-41, rus] 41-3864
- Dangerous glacial slope processes in mountain ecosystems of Siberia. Laptev, M.N., et al. [1986, p.63-65, rus] 41-4065
- Evidence for two zones of debris entrainment beneath the Greenland ice sheet. Sugden, D.E., et al. [1987, p.238-241, eng] 41-4227
- Glacial geology**
- Ice cover on Kerguelen during the last glacial. Hall, K., [1984, p.225-232, eng] 41-481
- Glacial deposition including moraines, drumlins and eskers. Minion, R., comp. [1985, 98p., eng] 41-825
- Glacial geologic processes. Drewry, D., [1986, 276p., eng] 41-963
- Glacial history of NE Wisconsin and Upper Michigan. Peterson, W.L., [1986, 14p., eng] 41-974
- Glacial geology and postglacial emergence, Baffin Island, NWT. Clark, P., [1985, p.1864-1871, eng] 41-1243
- Morphology and sediment processes and supply from Weddell Sea floor. Anderson, J.B., et al. [1986, p.121-129, eng] 41-1278
- Application of (14)C dating to the studies of glacial geology and geocryology. Gu, G., et al. [1986, p.159-165, chi] 41-1463
- Beach changes from retreating glacier ice in South Georgia. Gordon, J.E., et al. [1986, p.15-24, eng] 41-1844
- Mineralogy and morphology of disperse morainal debris on King George and Nelson islands. Konishchev, V.N., et al. [1984, p.104-110, rus] 41-2358
- Reinterpretation of glaciovolcanic interactions in Marie Byrd Land. McIntosh, W.C., et al. [1985, p.57-59, eng] 41-2624
- Observed processes of glacial deposition in Glacier Bay, Alaska. Anderson, P.J., ed. [1986, 167p., eng] 41-2974
- Sedimentary deposits in the northern lowland plains, Mars. Lucchitta, B.K., et al. [1986, p.E166-E174, eng] 41-3749
- Glacial and periglacial geology of Spitsbergen, Svalbard. Rowan, D.E., [1981, 115p., eng] 41-3892
- Morphosedimentary zones in the Bluenose Lake region, District of Mackenzie. St-Onge, D.A., et al. [1987, p.89-100, eng] 41-4010
- Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] 41-4280
- Glacial hydrology**
- Workshop on Alaskan Hydrology, Apr.1985. [1986, 106p. + 3 appends., eng] 41-471
- Effects of glaciers on runoff and runoff forecasting. Benson, C., et al. [1986, p.6-32, eng] 41-472
- Natural hazards caused by glaciers. Björnsson, H., et al. [1986, p.33-52, eng] 41-473
- Glaciers and sediment. Bezing, A., et al. [1986, p.53-69, eng] 41-474
- Calculating hydrological characteristics of the Mertabakher Lake outburst. Glazyrin, G.E., et al. [1986, p.36-43, rus] 41-546
- Systems and means of oceanic radio-communication. Panin, I.U.I., ed. [1984, 144p., rus] 41-557
- Glaciological field work and remote sensing, West Greenland. Thomsen, H.H., [1985, p.95-99, eng] 41-573
- Runoff in relation to hydroelectric stations, W. Greenland. Thomsen, H.H., et al. [1985, p.100-103, eng] 41-574
- Glaciological investigations in 1984 at Tasersiaq and Qapiarfup sermia, West Greenland. Olesen, O.B., [1985, p.104-107, eng] 41-575
- Glacier-climate investigations in 1984, West Greenland. Braithwaite, R.J., [1985, p.108-111, eng] 41-576
- Hydrology and chemistry of glacial meltwater and snowmelt, Norway. Amos, J., [1985, p.52-60, eng] 41-584
- Marginal and supraglacial lakes in Iceland. Björnsson, H., [1976, p.40-51, eng] 41-588
- Grimsvoth geothermal area, Vatnajökull, Iceland. Björnsson, H., et al. [1984, p.25-50, eng] 41-590
- Runoff from rock glaciers in the southern Alps of France. Evim, M., [1984, p.27-40, fre] 41-623
- Water discharge during surges of Variegated Glacier, Alaska. Humphrey, N., et al. [1986, p.195-207, eng] 41-679
- Glacial lake drainage near Söndre Strömfjord, West Greenland. Gordon, J.E., [1986, p.304, eng] 41-692
- Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed. [1984, 110p., rus] 41-721
- Equations for calculating water balance of mountain rivers. Muzakeev, M.A., et al. [1984, p.9-25, rus] 41-723
- Ground water runoff into Kirghiz rivers. Ergeshev, A., [1984, p.26-35, rus] 41-724

**Glacial hydrology (cont.)**

- Delineation of glacier drainage basins on Hofsjökull and Western Vatnajökull. Björnsson, H., et al., 1986, p.19-21, eng 41-731
- Mapping buried glacier ice, Monte Rosa, Italian Alps. Haeblerli, W., et al., 1986, p.78-81, eng 41-743
- Repeated glacier mapping for hydrological purposes: water power planning. Östrem, G., 1986, p.135-140, eng 41-756
- Glaciology of mountainous regions. Suslov, V.F., ed., 1986, 136p., rus 41-769
- Water resources in glaciers of the Syrdarya River basin. Akbarov, A.A., et al., 1986, p.80-88, rus 41-778
- Experimental determination of water movement in the Firn layers of Abramov Glacier. Glazyrin, G.E., et al., 1986, p.110-117, rus 41-781
- Hydrologic conditions in the Klatt Bog area, Anchorage, Alaska. Glass, R.L., 1986, 19p., eng 41-798
- Mudflow formation and transformation processes in the Gerkhovansu River basin. Dokukin, M.D., 1985, p.58-71, rus 41-845
- Hydraulic effects at the glacier bed and related phenomena. 1986, 148p., eng 41-961
- Glacial geologic processes. Drewry, D., 1986, 276p., eng 41-963
- Conditions conducive to glacial mudflow in the Aktru River valley, Altai Mountains, June 24, 1984. Barashkova, N.K., et al., 1986, p.121-124, rus 41-1651
- Calculating runoff from the Tadzhikistan glaciers. Musoev, Z., 1986, p.131-135, rus 41-1654
- Role of glaciers in the discharge of Pamiro-Alai rivers. Kemmerikh, A.O., 1985, p.79-84, rus 41-1817
- Tritium content of water flowing from Yala Glacier. Kamiyama, K., et al., 1986, p.11841-11844, eng 41-1856
- Thermophysics of glaciers. Zotikov, I.A., 1986, 275p., eng 41-2565
- Radiocarbon chronology of the last glaciation in McMurdo Sound. Denton, G.H., et al., 1985, p.59-61, eng 41-2625
- Pulsed fluctuations of water level in glacial rivers. Sokolov, D.P., 1986, p.99-103, rus 41-2722
- Glaciers, subglacial taliks and perennially frozen rocks. Romanovskii, N.N., et al., 1986, p.206-219, rus 41-2842
- Alph River ecosystem in southern Victoria Land. Howard-Williams, C., et al., 1986, p.21-33, eng 41-2871
- Glacio-fluvial sediment transfer. Gurnell, A.M., ed., 1987, 524p., eng 41-3124
- Glaciological research: trends and proposals. Saibene, C., 1985, p.68-72, ita 41-3175
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., 1987, 236p., rus 41-3270
- Subglacial drainage for an ice sheet resting upon a layered deformable bed. Shoemaker, E.M., et al., 1987, p.4935-4946, eng 41-3342
- Cationic denudation rate of an alpine glacial catchment. Metcalf, R.C., 1986, p.19-22, eng 41-3523
- Dye tracer experiments on the Findelengletscher, Switzerland. Moeri, T., et al., 1986, p.33-41, eng 41-3524
- Water storage in Storglaciären, Kebnekaise, Sweden. Öntling, M., et al., 1986, p.279-290, eng 41-3560
- Accelerated motion in a glacier approaching surge. Kamb, B., et al., 1987, p.27-46, eng 41-3593
- Hydrological investigations in the Mimer River basin, Svalbard, in 1983. Gokhman, V.V., et al., 1986, p.309-316, eng 41-3622
- Hydrological characteristics of Soler Glacier drainage, Patagonia. Fukami, H., et al., 1987, p.91-96, eng 41-3832
- Aspects of glacial hydrology in Patagonia. Peña, H., et al., 1987, p.141-150, eng 41-3839
- Lacustrine and river geosystems of the Oktyabr'skaya Revolyutsiya Islands (Severnaya Zemlya). Mordvinov, A.A., 1986, p.30-41, rus 41-3864
- Hydrological data collection, interpretation and analysis in Greenland. Thomsen, T., et al., 1986, p.273-282, eng 41-3902
- Glaciological studies in Asiatic highland region during 1985-1986. Watanabe, O., et al., 1987, p.1-10, eng 41-3908
- Runoff in glacier-covered watersheds of Langtang Valley, Nepal. Fukushima, Y., et al., 1987, p.11-18, eng 41-3909
- Suspended sediments in a glaciated watershed of Langtang Valley, Nepal. Ohta, T., et al., 1987, p.19-24, eng 41-3910
- Stream water temperature observations in Langtang Khola, Nepal Himalayas. Suzuki, M., et al., 1987, p.25-28, eng 41-3911
- Winter runoff in Langtang Valley, Nepal Himalayas. Motoyama, H., et al., 1987, p.29-33, eng 41-3912
- Discharge from a glacier in West Kunlun Mts., China. Nakawo, M., et al., 1987, p.111-114, eng 41-3922
- Hydrological data of Langtang Valley, Nepal Himalayas. Fukushima, Y., et al., 1987, p.115-120, eng 41-3923
- Ice and hydropower. Thomsen, H.H., 1986, 73p., dan 41-3960
- Hydraulics of subglacial cavities. Walder, J.S., 1986, p.439-445, eng 41-4299
- Comparing glacio-hydrology of Swiss Alps and Tian Shan. Kang, E., 1986, p.9-18, 130-139, rus 41-4333
- Glacial floods and their control. Mochalov, V.P., et al., 1986, p.104-108, 216-219, rus 41-4351
- Artificial drainage for prevention of glacial lake bursts. Nurkadilov, L.K., et al., 1986, p.108-110, 220-221, rus 41-4352
- Calculating the burst and flooding of moraine-dammed glacial lakes. Keremkulov, V.A., et al., 1986, p.110-113, 221-224, rus 41-4353
- Studies of glacial hydrology and bursting of glacial lakes. Collins, D.N., 1986, p.114-122, 224-232, rus 41-4354
- Origin and evolution of Goes Lake, Spitsbergen. Grzes, M.G., et al., 1986, p.122-124, 233-234, rus 41-4355
- Terrain characteristics for glacio-hydrological analysis. Clark, M.J., et al., 1987, p.45-49, eng 41-4433
- See also: Subglacial drainage
- Glacial lakes**
- Calculation and prediction of the regime and distribution of mountain glaciers. Tokmagambetov, G.A., et al., 1985, 159p., rus 41-518
- Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed., 1986, 84p., rus 41-543
- Calculating hydrological characteristics of the Mertsbakher Lake outburst. Glazyrin, G.E., et al., 1986, p.36-43, rus 41-546
- Marginal and supraglacial lakes in Iceland. Björnsson, H., 1976, p.40-51, eng 41-588
- Grimsvötn geothermal area, Vatnajökull, Iceland. Björnsson, H., et al., 1984, p.25-50, eng 41-590
- Deflation and nival eolian phenomena near a glacier, SW Spitsbergen. Migala, K., et al., 1984, p.197-206, eng 41-635
- Glacial lake drainage near Söndre Strömfjord, West Greenland. Gordon, J.E., 1986, p.304, eng 41-692
- Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed., 1984, 110p., rus 41-721
- Types of mudflows and danger areas in the Kirghiz Range. Bobushev, T.S., 1984, p.35-41, rus 41-725
- Natural water bodies as indicators of landscapes. Aseev, V.V., et al., 1986, p.75-80, rus 41-1369
- Climatic handbook for Glacier National Park. Finklin, A.L., 1986, 124p., eng 41-2183
- Sedimentation at the foot of volcanoes in various climatic settings. Kuralenko, N.P., 1986, 111p., rus 41-2363
- Cataclysmic Late Pleistocene flooding from glacial Lake Missoula: a review. Baker, V.R., et al., 1985, p.1-41, eng 41-2683
- Professor Mathews, outburst floods, and other glaciological disasters. Clarke, G.K.C., 1986, p.859-868, eng 41-2685
- On deglaciation-induced perturbations of the geoid. Wolf, D., 1986, p.269-272, eng 41-2686
- Could the water redding of Lake Tovel (Trentino, Italy) be related to fluctuations of Alpine glaciers. Paganelli, A., 1985, p.83-88, ita 41-3177
- Glacier-dammed lake investigations in the Hullet Lake area, South Greenland. Dawson, A.G., 1983, 24p., eng 41-3302
- Water from glacier-dammed Russell Lake, Alaska. Seitz, H.R., et al., 1986, 10p., eng 41-3303
- Sedimentation in a glacier lake. Östrem, G., et al., 1987, p.123-138, eng 41-3556
- Study of the nature and incidence of density currents in a shallow glacial lake. Weirich, F.H., 1986, p.396-413, eng 41-3786
- Cooling of water and air by melting ice. Fujiyoshi, Y., et al., 1987, p.97-102, eng 41-3833
- Water depth of Lagoon San Rafael, Patagonia. Nakajima, C., et al., 1987, p.103-105, eng 41-3834
- Hydrometeorological regime and dynamics of Lake Issyk-Kul'. Pomortsev, O.A., ed., 1988, 153p., rus 41-3870
- Significance of rock glaciers in the formation and development of lakes in the Tien Shan highlands. Tarakanov, A.G., 1985, p.137-145, rus 41-3871
- Diamictic mass in glacial Lake Maumee III sediments, S.W. Ontario. Stewart, R.A., 1987, p.844-849, eng 41-4082
- Humic substances from a blue lake on the Greenland ice cap. Gadel, F., et al., 1987, p.107-109, eng 41-4140
- Engineering protection of mountainous regions from dangerous glacial processes. Grakovich, V.F., et al., 1986, p.102-104, 214-216, rus 41-4350
- Glacial floods and their control. Mochalov, V.P., et al., 1986, p.104-108, 216-219, rus 41-4351
- Artificial drainage for prevention of glacial lake bursts. Nurkadilov, L.K., et al., 1986, p.108-110, 220-221, rus 41-4352
- Calculating the burst and flooding of moraine-dammed glacial lakes. Keremkulov, V.A., et al., 1986, p.110-113, 221-224, rus 41-4353
- Studies of glacial hydrology and bursting of glacial lakes. Collins, D.N., 1986, p.114-122, 224-232, rus 41-4354
- Origin and evolution of Goes Lake, Spitsbergen. Grzes, M.G., et al., 1986, p.122-124, 233-234, rus 41-4355
- Seasat altimeter observations of an antarctic "lake". Cudlip, W., et al., 1987, p.55-59, eng 41-4435
- Glacial meteorology**
- Summer 1979: ice climatology of the Canadian Arctic. Dey, B., 1985, p.25-33, eng 41-1481
- Summer climate of the Northern Patagonia Icefield. Inoue, J., et al., 1987, p.7-14, eng 41-3822
- Characteristics of precipitation and vertical structure of air temperature in the northern Patagonia. Fujiyoshi, Y., et al., 1987, p.15-23, eng 41-3823
- Wind regime of San Rafael Glacier, Patagonia. Inoue, J., 1987, p.25-30, eng 41-3824
- Meteorological measurements at Soler Glacier, Patagonia, in 1985. Fukami, H., et al., 1987, p.31-36, eng 41-3825
- Glaciological studies in Asiatic highland region during 1985-1986. Watanabe, O., et al., 1987, p.1-10, eng 41-3908
- Meteorological features in Langtang Valley, Nepal Himalayas, 1985-1986. Takahashi, S., et al., 1987, p.35-40, eng 41-3913
- Altitudinal dependence of precipitation in Langtang Valley, Nepal Himalayas. Seko, K., 1987, p.41-47, eng 41-3914
- Heat balance components of Tuyukau Glacier at different atmospheric circulations. Golovkova, R.G., et al., 1986, p.29-34, 148-152, rus 41-4336
- Glacial periods**
- See: Ice age theory; Paleoclimatology; Pleistocene
- Glacial rivers**
- Regularities governing altitudinal belts of maximum river discharge in Tadzhikistan. Kemmerikh, A.O., 1986, p.166-170, rus 41-128
- Permafrost. Benson, C., et al., 1986, p.99-106, eng 41-476
- Marginal and supraglacial lakes in Iceland. Björnsson, H., 1976, p.40-51, eng 41-588
- Cause of Jökullhlaups in the Skaftá River, Vatnajökull. Björnsson, H., 1977, p.71-78, eng 41-589
- Grimsvötn geothermal area, Vatnajökull, Iceland. Björnsson, H., et al., 1984, p.25-50, eng 41-590
- Climatic variation and runoff from Alpine glaciers. Collins, D.N., 1984, p.127-145, eng 41-630
- Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed., 1984, 110p., rus 41-721
- Hydrologic regime of rivers in inner and central Tien Shan. Muzakeev, M.A., 1984, p.3-9, rus 41-722
- Equations for calculating water balance of mountain rivers. Muzakeev, M.A., et al., 1984, p.9-25, rus 41-723
- Changes in glacial runoff of Central Asian rivers in relation to possible climatic variations. Glazyrin, G.E., et al., 1986, p.59-70, rus 41-777
- Report of jökullhlaups in 1981, 1982 and 1983. Rist, S., 1984, p.165-172, icej 41-465
- Distribution of existing glaciers in the Qaidam Basin. Yang, H., et al., 1986, p.171-175, chi 41-465
- Problems of satellite meteorology and remote sensing. Sitnikova, M.V., ed., 1986, 104p., rus 41-1684
- Influence of glacial water on the formation of the chemical composition of mountain river water. Gachechiladze, G.A., 1986, p.78-82, eng 41-1692
- Role of glaciers in the discharge of Pamiro-Alai rivers. Kemmerikh, A.O., 1985, p.79-84, rus 41-1817
- Pulsed fluctuations of water level in glacial rivers. Sokolov, D.P., 1986, p.99-103, rus 41-2722
- Channel processes, changes, and sediments in a proglacial braided river. Ashworth, P.J., et al., 1986, p.361-371, eng 41-3566
- Effects of eruptions of Mount Redoubt on the flow of Drift Glacier, Alaska. Sturm, H., et al., 1986, p.355-362, eng 41-4288
- Glacier mass balance and river runoff in Central Asia. Akbarov, A.A., et al., 1986, p.56-59, 170-173, rus 41-4340
- Runoff in basins with variable extent of glaciation. Oerter, H., et al., 1986, p.59-64, 173-178, rus 41-4341
- Variations in mountain river runoff related to climatic changes. Semenov, A.A., et al., 1986, p.78-82, 191-195, rus 41-4345
- Glaciation**
- Glaciation of Norðrónskjöld Land, W. Spitsbergen. Musil, A., 1986, p.497-513, eng 41-74
- Paleogeology: investigations of fossil ground ice in permafrost. Chaplinskaya, F.A., et al., 1986, p.65-72, rus 41-107
- Glacioclimatic conditions in the European Arctic in the Late Holocene. Surova, T.G., et al., 1986, p.149-154, rus 41-124
- Quaternary research (Selected papers of the 11th INQUA Congress). Kartashov, I.P., ed., 1986, 200p., rus 41-549
- Glacial ice-sheet system interlocked by sea level. Denton, G.H., et al., 1986, p.3-26, eng 41-611
- Snow and ice in Earth's environment. Kotliakov, V.M., 1986, 157p., rus 41-698

- Late Quaternary glacial chronology for Baffin Island, N.W.T. Dowdeswell, J.A., [1984, p.311-320, eng] 41-1233
- Glacial geology and postglacial emergence, Baffin Island, N.W.T. Clark, P., [1985, p.1864-1871, eng] 41-1243
- Glaciation level in West Greenland. Humlum, O., [1985, p.311-319, eng] 41-1250
- Pliocene variations of Antarctic Convergence in southwest Atlantic. Ciesielski, P.F., et al, [1986, p.197-232, eng] 41-1264
- Where are the former glacial relics in Guilin area. Shi, Y., et al, [1986, p.97-106, chi] 41-1457
- Model of Pleistocene glaciation of the system "glaciers-ocean-troposphere-atmosphere". Karachenov, A.T., [1986, p.38-45, rus] 41-1635
- Nivation and local glaciation in N. and S. Sweden. A progress report. Rapp, A., et al, [1986, p.197-205, eng] 41-1878
- Neoglaciation in the Coast Mts., B.C., Canada. Ryder, J.M., et al, [1986, p.273-287, eng] 41-1928
- Climatic belts in the case of a unipolar glaciation. Flohn, H., [1984, p.609-620, eng] 41-1974
- Climatic changes on a yearly to millennial basis. [1984, 667p., eng] 41-2005
- Climate and glaciation in Kong Karls Land, eastern Svalbard. Holmgren, B., et al, [1984, p.291-302, eng] 41-2007
- Model calculation of glacial evolution. Krass, M.S., [1984, p.86-103, rus] 41-2357
- Arctic shelf in the late Pleistocene and certain problems of paleogeology. Vozovik, I.U.I., [1986, p.449-452, eng] 41-2572
- Baffin Bay environmental change during last interglacial/glacial transition. Andrews, J.T., et al, [1985, p.333-355, eng] 41-2682
- On deglaciation-induced perturbations of the geoid. Wolf, D., [1986, p.269-272, eng] 41-2686
- Pinedale deglaciation and Holocene environmental changes, Lemhi Mountains. Butler, D.R., [1986, p.39-46, eng] 41-2705
- Two Be-10 peak depositions in ice during last glaciation. Raisbeck, G.M., et al, [1987, p.273-277, eng] 41-2891
- Using satellite survey data for studying mass transfer in glacial systems. Nosenko, G.A., [1986, p.26-31, rus] 41-3211
- Glaciation and the evolution of the Canadian high arctic landscape. England, J., [1987, p.419-424, eng] 41-3319
- Paleogeological studies of relic ground ice in permafrost. Kaplanski, F.A., et al, [1986, p.257-266, eng] 41-3616
- Quaternary glaciation and paleogeography of West Kunlun Mountains. Zheng, B., [1987, p.93-102, eng] 41-3920
- Acoustic survey and glacial history of Adams Lake, Labrador. Bell, T., et al, [1987, p.101-110, eng] 41-4011
- Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] 41-4280
- Ice-wedge casts in the Severn estuary, S.W. Britain. Allen, J.R.L., [1987, p.109-118, eng] 41-4520
- See also: Alpine glaciation
- Glacier ablation**
- Wind regime over Golubini glacier during the ablation period. Kurochkin, I.U.N., [1986, p.170-174, rus] 41-129
- Calculation of degree-days for glacier-climate research. Braithwaite, R.J., [1984, p.1-8, eng] 41-621
- Ice ablation in relation to climatic factors in W. Greenland. Braithwaite, R.J., et al, [1984, p.155-168, eng] 41-632
- Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatanov, D.M., ed, [1984, 110p., rus] 41-721
- Hydrologic regime of rivers in inner and central Tien Shan. Muzakeev, M.A., [1984, p.3-9, rus] 41-722
- Equations for calculating water balance of mountain rivers. Muzakeev, M.A., et al, [1984, p.9-25, rus] 41-723
- Territorial concordance of long-range runoff fluctuations during vegetational periods on rivers of northern Kirgizia. Alamanov, S.K., [1984, p.63-68, rus] 41-726
- Topography in the ablation area of the Khumbu Glacier, Nepal. Watanabe, O., et al, [1986, p.177-180, eng] 41-765
- Recent changes in the glaciers of Heard Island. Allison, I.F., et al, [1986, p.255-271, eng] 41-1020
- Movement on the ice front. Gellatly, A., et al, [1986, p.294-299, eng] 41-1512
- Intensity of alimentation of Late Pleistocene glaciers. Grosval'd, M.G., et al, [1986, p.56-64, rus] 41-1638
- Behavior of the Medvezhiy glacier during 1982-1984. Bulnitskii, A.B., et al, [1986, p.99-106, rus] 41-1647
- Influence of glacier water on the formation of the chemical composition of mountain river water. Gachechiladze, G.A., [1986, p.78-82, eng] 41-1692
- Role of glaciers in the discharge of Pamiro-Alai rivers. Kemmerikh, A.O., [1985, p.79-84, rus] 41-1817
- Glacier systems in the Soviet northeast. Krenke, A.N., et al, [1980, p.166-185, eng] 41-2343
- Geology and origin of the Elephant Moraine on the east antarctic ice sheet. Faure, G., et al, [1985, p.11-12, eng] 41-2623
- Observed processes of glacial deposition in Glacier Bay, Alaska. Anderson, P.J., ed, [1986, 167p., eng] 41-2974
- Soviet Glacier Inventory and present glaciation of the Akkem Valley (Altai, Southern Siberia). Smiraglia, C., [1985, p.196-204, ita] 41-3187
- Recent changes in a calving glacier, Austerdalsisen, Svartisen, Norway. Theakstone, W.H., et al, [1986, p.303-316, eng] 41-3562
- Lake sediments and deglaciation on Svalbard. Österholm, H., [1986, p.329-344, eng] 41-3564
- Hydrological investigations in the Mimer River basin, Svalbard, in 1983. Gokhman, V.V., et al, [1986, p.309-316, eng] 41-3622
- Summer climate of the Northern Patagonia Icefield. Inoue, J., et al, [1987, p.7-14, eng] 41-3822
- Ablation of ice and heat balance on Soler Glacier, Patagonia. Fukami, H., et al, [1987, p.37-42, eng] 41-3826
- Ice thickness deduced from gravity anomalies in Patagonia. Casassa, G., [1987, p.43-57, eng] 41-3827
- Ice avalanches on Soler Glacier, Patagonia. Kobayashi, S., et al, [1987, p.87-90, eng] 41-3831
- Formation of dirt layers and surface dust by micro-plants in Yala Glacier, Nepal. Kohshima, S., [1987, p.63-68, eng] 41-3917
- Analysis and computation of regimes of major mountain glacier systems. Krenke, A.N., [1986, p.4-9, 125-130, rus] 41-4332
- Comparing glacio-hydrology of Swiss Alps and Tian Shan. Kang, E., [1986, p.9-18, 130-139, rus] 41-4333
- Heat balance components of Tuyuksu Glacier at different atmospheric circulations. Golovkova, R.G., et al, [1986, p.29-34, 148-152, rus] 41-4336
- Glacier mass balance and river runoff in Central Asia. Akbarov, A.A., et al, [1986, p.56-59, 170-173, rus] 41-4340
- Runoff in basins with variable extent of glaciation. Oerter, H., et al, [1986, p.59-64, 173-178, rus] 41-4341
- Modeling runoff from Vernagtferner, Austria. Escher-Vetter, H., et al, [1986, p.65-69, 178-182, rus] 41-4342
- Calculating runoff hydrograph for the Marukh mountain-glacier basin, Caucasus. Balasava, V.A., et al, [1986, p.69-74, 182-186, rus] 41-4343
- Forecasting glacial runoff in river basins of Central Asia. Kononov, V.G., [1986, p.75-78, 187-191, rus] 41-4344
- Glacier alimentation**
- Volcanism and glaciers in the Anthropogene. Melekestsev, I.V., [1986, p.27-35, rus] 41-102
- Movement on the ice front. Gellatly, A., et al, [1986, p.294-299, eng] 41-1512
- Intensity of alimentation of Late Pleistocene glaciers. Grosval'd, M.G., et al, [1986, p.56-64, rus] 41-1638
- Snow accumulation at the alimentations-limit altitude of Spitsbergen glaciers. Krenke, A.N., et al, [1986, p.90-93, rus] 41-1644
- Recent glaciation of the Pekul'ney Range. Sedov, R.V., et al, [1986, p.128-130, rus] 41-1653
- Altitudinal dependence of precipitation in Langtang Valley, Nepal Himalayas. Seko, K., [1987, p.41-47, eng] 41-3914
- Snow cover and dirt layer in the accumulation area of Yala Glacier, Nepal. Iida, H., et al, [1987, p.55-62, eng] 41-3916
- Analysis and computation of regimes of major mountain glacier systems. Krenke, A.N., [1986, p.4-9, 125-130, rus] 41-4332
- Glacier beds**
- Waves on glacial beds. Mazo, V.L., [1986, p.20-26, rus] 41-101
- Pal'gov-Shumskii method of calculating bottom relief of glacier beds. Bulnitskii, A.B., et al, [1986, p.195-201, rus] 41-134
- Physics of ice sheets and underlying bedrock. Birchfield, G.E., et al, [1985, p.11, 294-11, 302, eng] 41-494
- Ice thickness measurements by magnetic surveys. Thorning, L., [1985, p.112-114, eng] 41-577
- Effects of ice thickness and surface slope on glacier flow. Kamb, B., et al, [1986, p.267-284, eng] 41-688
- Surface and bedrock topography of icecaps in Iceland. Björnsson, H., [1986, p.11-18, eng] 41-730
- Mapping of the Nordaustlandet ice caps. Dowdeswell, J.A., et al, [1986, p.51-58, eng] 41-738
- Radio echo-sounding on Jostedalbreen, Norway. Saetang, A.C., et al, [1986, p.156-158, eng] 41-760
- Hydraulic effects at the glacier bed and related phenomena. [1986, 148p., eng] 41-961
- Glacial erosion in western Antarctica. Glazovskii, A.F., [1986, p.135-139, rus] 41-1655
- Bed topography from radio echo soundings of Columbia Glacier, Alaska. Brown, C.S., et al, [1986, 26p., eng] 41-2119
- Effect of bedrock on environments of Spitsbergen glaciers. Drozdowski, E., [1985, p.397-413, eng] 41-2192
- Self-organization of glacial relief. Mazo, V.L., [1986, p.309-312, rus] 41-2305
- Mineralogy and morphology of disperse morainial debris on King George and Nelson islands. Konishchev, V.N., et al, [1984, p.104-110, rus] 41-2358
- Glaciers, subglacial taliks and perennially frozen rocks. Romanovskii, N.N., et al, [1986, p.206-219, rus] 41-2842
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al, [1987, p.249-285, eng] 41-3284
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] 41-3286
- Mikkaglacikren: bed topography and response to 20th century climate change. Holmlund, P., [1986, p.291-302, eng] 41-3561
- Relief and deposits of the Severnaya Zemlya islands. Makeev, V.M., et al, [1986, p.331-338, eng] 41-3625
- Hydraulics of subglacial cavities. Walder, J.S., [1986, p.439-445, eng] 41-4299
- Internal reflecting horizons in Spitsbergen glaciers. Bamber, J.L., [1987, p.5-10, eng] 41-4427
- Interface tracking in digitally recorded glaciological data. Cooper, A.P.R., [1987, p.50-54, eng] 41-4434
- Radar sounding of fossil ice within the Kuranosuke snow patch, Japan. Yamamoto, K., et al, [1987, p.218-220, eng] 41-4462
- Glacier flow**
- Waves on glacial beds. Mazo, V.L., [1986, p.20-26, rus] 41-101
- Paleogeological investigations of fossil ground ice in permafrost. Kaplanski, F.A., et al, [1986, p.65-72, rus] 41-107
- Maximum southward advance of the Kara center ice sheet. Diatlova, I.N., [1986, p.154-157, rus] 41-125
- Surface velocity determination on large polar glaciers by aerial photogrammetry. Brecher, H.H., [1986, p.22-26, eng] 41-412
- Finite element modeling of glaciers. Nixon, W.A., et al, [1985, p.11, 303-11, 311, eng] 41-495
- Numerical experiments on large-scale glacial erosion. Oerlemans, J., [1984, p.107-126, eng] 41-629
- Explanatory text to the map of Lewis Glacier, Mount Kenya, 1983. Patzelt, G., et al, [1984, p.177-195, ger] 41-634
- Follow-up measurements of Pasterze (Glockner group) in 1984. Wakonig, H., [1984, p.223-228, ger] 41-637
- Numerical study of plane ice-sheet flow. Hutter, K., et al, [1986, p.139-160, eng] 41-674
- Debris-influenced sliding laws and basal debris balance. Shoemaker, E.M., [1986, p.224-231, eng] 41-682
- Effect of till rheology on the flow and profile of the Laurentide ice sheet, USA. Beget, J.E., [1986, p.235-241, eng] 41-684
- Effects of ice thickness and surface slope on glacier flow. Kamb, B., et al, [1986, p.267-284, eng] 41-688
- Glacier flow response to perturbations in ice thickness and surface slope. Echelmeyer, K.A., et al, [1986, p.285-298, eng] 41-689
- Mapping of Soler Glacier, Chile. Aniya, M., et al, [1986, p.8-10, eng] 41-729
- Theodolite measurements of fast moving glaciers. Dahl-Jensen, D., et al, [1986, p.42-46, eng] 41-736
- Motion events on Variegated Glacier, Alaska. Harrison, W.D., et al, [1986, p.82-89, eng] 41-744
- High-precision distance measurement with an unmanned moving target. Ito, H., et al, [1986, p.93-95, eng] 41-746
- Ice velocity at the terminus of Columbia Glacier, Alaska. Krimmel, R.M., et al, [1986, p.117-123, eng] 41-752
- Velocity measurements on Dugaard-Jensen Glacier, Scoresbysund, East Greenland. Reeh, N., et al, [1986, p.146-150, eng] 41-758
- Ice divide at Blue Glacier, U.S.A. Waddington, E.D., et al, [1986, p.175-176, eng] 41-764
- Topography in the ablation area of the Khumbu Glacier, Nepal. Watanabe, O., et al, [1986, p.177-180, eng] 41-765
- Intrasectoral glacier variations in northern Tien Shan according to lichenometric data. Pomortsev, O.A., [1986, p.403-412, rus] 41-886
- Antarctica: measuring glacier velocity from satellite images. Lucchitta, B.K., et al, [1986, p.1105-1108, eng] 41-962
- Glacial geologic processes. Drewry, D., [1986, 276p., eng] 41-963
- Deglaciation of the mountainous region of NW Montana. Carrara, P.E., et al, [1986, p.317-325, eng] 41-1179
- Arapaho rock glacier, Front Range, Colorado, U.S.A.: a 25-year resurvey. Benedict, J.B., et al, [1986, p.349-352, eng] 41-1182
- Mass balance and sliding velocity of the Puget lobe, Cordilleran ice sheet. Booth, D.B., [1986, p.269-280, eng] 41-1189
- Statistical interpretation of the fabric of a rock glacier. Giardinio, J.R., et al, [1985, p.165-177, eng] 41-1227
- Tree-ring analysis of movement of a rock glacier, Mount Meitas, CO. Giardinio, J.R., et al, [1984, p.299-309, eng] 41-1232
- Southeastward ice flow in central Quebec. Bouchard, M.A., et al, [1985, p.1536-1541, eng] 41-1239
- Neoglacial advance of the Boundary Glacier, Banff National Park. Gardner, J.S., et al, [1985, p.1753-1755, eng] 41-1240

## Glacier flow (cont.)

- Glacial dispersal train of Paleozoic erratics. Tippet, C.R., [1985, p.1818-1826, eng] 41-1242
- Glacial geology and postglacial emergence, Baffin Island, N.W.T. Clark, P., [1985, p.1864-1871, eng] 41-1243
- Glacier thickness and velocity measurements. Sheremet'ev, A.N., [1986, p.127-132, rus] 41-1269
- Borehole deformation experiments, Barnes Ice Cap, Canada. Hooke, R.L., et al, [1986, p.261-276, eng] 41-1293
- Design, development and deployment of instrument packages to monitor the motion of glacial ice masses at sea. Lever, J.H., et al, [1986, p.225-236, eng] 41-1594
- Saturated porous layer beneath active ice stream. Blankenship, D.D., et al, [1986, p.54-57, eng] 41-1779
- Deformation of till beneath ice stream B, West Antarctica. Alley, R.B., et al, [1986, p.57-59, eng] 41-1780
- Measuring glacier fluctuation. Clarke, G.K.C., et al, [1986, p.727-733, eng] 41-1931
- Self-organization of glacial relief. Mazo, V.L., [1986, p.309-312, rus] 41-2305
- Force budget of ice sheets. Whillans, I.M., [1987, p.17-36, eng] 41-2462
- Dating of the Little Ice Age glacier advance, SW Norway. Matthews, J.A., et al, [1986, p.369-375, eng] 41-2472
- Occurrence of boulders of stromatolitic dolomite along St. Lawrence Estuary. Dionne, J.C., [1986, p.93-98, fre] 41-2708
- Reconstructions of Wisconsin Laurentide ice sheet. Fisher, D.A., et al, [1985, p.229-238, eng] 41-2760
- Elements of a computational theory for glaciers. Yakowitz, S., et al, [1986, p.132-150, eng] 41-2896
- Velocity and altitude of Hubbard Glacier, Alaska, Aug. 1978. Krimmel, R.M., et al, [1986, 13p., eng] 41-3227
- Ice stream-ice shelf interaction in West Antarctica. Bindschadler, R.A., et al, [1987, p.161-180, eng] 41-3279
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] 41-3280
- On the flow within the transition zone between ice sheet and ice shelf. Herterich, K., [1987, p.185-202, eng] 41-3281
- Finite-element method applied to a time-dependent flowband model. Fastook, J.L., [1987, p.203-221, eng] 41-3282
- Finite-element method applied to a time-dependent flowband model. Fastook, J.L., [1987, p.203-221, eng] 41-3282
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al, [1987, p.249-285, eng] 41-3284
- Tbilisa Glacier (glaciological and hydrometeorological investigations). Giginishvili, G.N., ed, [1986, 116p., rus] 41-3367
- Behavior of Columbia Glacier, Alaska. Meier, M.F., et al, [1985, 41p. + 8 maps, eng] 41-3403
- Ice flow over a bed of simple form. Meyssonier, J., [1983, 358p., fre] 41-3557
- Extrusion flow demonstrated by borehole deformation measurements over a regel, Storglaciären, Sweden. Hooke, R.L., et al, [1987, p.72-78, eng] 41-3599
- Ice flow velocity at Lewis Glacier, East Africa. Hastenrath, S., [1987, p.79-82, eng] 41-3600
- Basal sliding and drift deformation in a China glacier. Echelmeyer, K., et al, [1987, p.83-98, eng] 41-3601
- Research in the tunnel of Urumqi Glacier No.1. Huang, M., et al, [1987, p.99-104, eng] 41-3602
- Paleoglaciological studies of relic ground ice in permafrost. Kaplanski, F.A., et al, [1986, p.257-266, eng] 41-3616
- Characteristics of ice flow of Soler Glacier, Patagonia. Naruse, R., [1987, p.79-85, eng] 41-3830
- Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield. Naruse, R., et al, [1987, p.133-140, eng] 41-3838
- Ice flow history and glacial dispersal in the Labrador Trough. Klassen, R.A., et al, [1987, p.61-71, eng] 41-4009
- Morphosedimentary zones in the Bluenose Lake region, District of Mackenzie. St-Onge, D.A., et al, [1987, p.89-100, eng] 41-4010
- Model of the ice age cycle. Hyde, W.T., et al, [1987, p.1351-1374, eng] 41-4053
- Origin of glacial raft: detachment, transport, deposition. Ruszczynska-Szenajch, H., [1987, p.101-112, eng] 41-4100
- Genesis of the push moraine at Kötlujökull, Iceland: a commentary. Humlum, O., et al, [1985, p.127-132, eng] 41-4131
- Wave ogives. Waddington, E.D., [1986, p.325-334, eng] 41-4284
- Stress-gradient coupling in glacier flow. Kamb, B., [1986, p.335-341, eng] 41-4285
- Stress-gradient coupling in glacier flow: IV. Effects of the "T" term. Kamb, B., et al, [1986, p.342-349, eng] 41-4286
- Effects of eruptions of Mount Redoubt on the flow of Drift Glacier, Alaska. Sturm, M., et al, [1986, p.355-362, eng] 41-4288
- Isotropic points on glaciers. Nye, J.F., [1986, p.363-365, eng] 41-4289
- Flow law for vertical velocity and age-depth profiles in polar ice. Wolff, E.W., et al, [1986, p.366-370, eng] 41-4290
- Motion of sub-freezing ice past particles. Walder, J.S., [1986, p.41-4296, eng] 41-4296
- Basal water and high-pressure basal ice. Weertman, J., [1986, p.455-463, eng] 41-4301
- Rock glaciers in the dry Andes. Lliboutry, L., [1986, p.18-25, 139-144, rus] 41-4334
- Dynamics and thermal regime of glaciers. Shumskii, P.A., et al, [1986, p.34-39, 152-157, rus] 41-4337
- Possible mechanism of surges originating in bodies of pulsating glaciers. Kazanskii, A.B., [1986, p.87-92, 200-205, rus] 41-4347
- Origin and evolution of Goes Lake, Spitsbergen. Grzes, M.G., et al, [1986, p.122-124, 233-234, rus] 41-4355
- Stagnant ice at the bed of White Glacier, Axel Heiberg Island, N.W.T., Canada. Blatter, H., [1987, p.35-38, eng] 41-4431
- Glacier fluctuations
- See: Glacier oscillation
- Glacier heat balance
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] 41-3286
- Ablation of ice and heat balance on Soler Glacier, Patagonia. Fukami, H., et al, [1987, p.37-42, eng] 41-3826
- Glacier ice
- Geologic conditions of the burial of Pleistocene glacier ice in the Yenisey River area. Astakhov, V.I., [1986, p.72-78, rus] 41-108
- Buried glacier ice and related lithomorphogenetic problems. Karukiapp, R.I.A., [1986, p.78-83, rus] 41-109
- Pal'gov-Shumskii method of calculating bottom relief of glacier beds. Bulnitskii, A.B., et al, [1986, p.195-201, rus] 41-134
- Glacier-generated earthquakes from Prince William Sound, Alaska. Wolf, L.W., et al, [1986, p.367-379, eng] 41-262
- Quaternary research (Selected papers of the 11th INQUA Congress). Kartashov, I.P., ed, [1986, 200p., rus] 41-549
- Mars: periglacial and glacial relief forms. Lucchitta, B.K., [1986, p.183-193, rus] 41-550
- Determination of particle paths using the finite-element method. Stoller, D.F.E., et al, [1986, p.219-223, eng] 41-681
- Snow and ice in Earth's environment. Kotliakov, V.M., [1986, 157p., rus] 41-698
- Glaciology of mountainous regions. Suslov, V.F., ed, [1986, 136p., rus] 41-769
- Mass balance and trends in glacier changes in the USSR. Akbarov, A.A., et al, [1986, p.43-599, rus] 41-775
- Changes in glacial runoff of Central Asian rivers in relation to possible climatic variations. Glazyrin, G.E., et al, [1986, p.59-70, rus] 41-776
- Formulas for calculating air temperature and global radiation over glaciers. Konovalov, V.G., et al, [1986, p.71-80, rus] 41-777
- Water resources in glaciers of the Syrdar'ia River basin. Akbarov, A.A., et al, [1986, p.80-88, rus] 41-778
- New formula for calculating the volume of mountain glaciers. Mazo, A.B., et al, [1986, p.88-98, rus] 41-779
- Mass balance of Golubin Glacier. Ermolov, A.A., et al, [1986, p.98-102, rus] 41-780
- Experimental determination of water movement in the Firn layers of Abramov Glacier. Glazyrin, G.E., et al, [1986, p.110-117, rus] 41-781
- Long period regime of a drifted snow field. Pertsiger, F.I., [1986, p.117-123, rus] 41-782
- Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples. Kerimov, A.M., et al, [1985, p.71-78, rus] 41-846
- Intrasecular glacier variations in northern Tien Shan according to lichenometric data. Pomortsev, O.A., [1986, p.403-412, rus] 41-886
- Problem of glacier mass balance and its significance for glaciology. Kotliakov, V.M., [1986, p.4-8, 140-144, eng] 41-1046
- Recent fluctuations of mountain glaciers in the Northern Hemisphere. Makarevich, K.G., et al, [1986, p.25-33, 157-163, eng] 41-1050
- Induced fluctuations of the Shumskiy glacier in Dzhungarskiy Alatau. Cherkasov, P.A., et al, [1986, p.38-44, 168-173, eng] 41-1052
- Influence of large-scale atmospheric processes on the fluctuations of glaciers. Denisova, T.I.A., et al, [1986, p.52-58, 179-185, eng] 41-1055
- Lithogenesis of ground ice. Solomatina, V.I., [1986, 216p., rus] 41-1342
- Mathematical model and forecasts of thermokarst evolution. Grigorian, S.S., et al, [1986, p.45-49, rus] 41-1636
- Changes in forms of mountain glaciers in the Polar Urals. Tiulin, A.S., et al, [1986, p.96-99, rus] 41-1646
- Behavior of the Medvezhiy glacier during 1982-1984. Bulnitskii, A.B., et al, [1986, p.99-106, rus] 41-1647
- Spore and pollen distribution in snow on the southern slope of El'brus Mountain. Khmelevskoi, I.F., et al, [1986, p.113-115, rus] 41-1649
- Recent glaciation of the Pekul'ney Range. Sedov, R.V., et al, [1986, p.128-130, rus] 41-1653
- Calculating runoff from the Tadzhikistan glaciers. Musoev, Z., [1986, p.131-135, rus] 41-1654
- Glacial erosion in western Antarctica. Glazovskii, A.F., [1986, p.135-139, rus] 41-1655
- Influence of glacier water on the formation of the chemical composition of mountain river water. Gachechiladze, G.A., [1986, p.78-82, eng] 41-1692
- Origin of some buried ice forms in the Yamal tundra. Krass, M.S., et al, [1986, p.66-75, rus] 41-1793
- Pseudomonas genus of bacteria isolated from Antarctic ice sheets. Sorokina, T.A., et al, [1986, p.494-504, rus] 41-1824
- Tritium content of water flowing from Yala Glacier. Kamiyama, K., et al, [1986, p.11,841-11,844, eng] 41-1856
- Deriving the ice sheet evolution equations. Grigorian, S.S., et al, [1984, p.892-903, eng] 41-2074
- The ice: a journey to Antarctica. Pyne, S.J., [1986, 428p., eng] 41-2079
- Technical schemes for melting natural ice for water-supply systems. Vdovin, I.U.I., [1986, p.189-193, rus] 41-2176
- Glacial giants. History of origin, existence and deterioration of great glaciers. Balandin, R.K., [1986, 175p., rus] 41-2252
- Cryolithozone of central Asia. Gorbunov, A.P., [1986, 57p., rus] 41-2349
- Ice borehole gas sampler for isotopic dating. Zemtsov, A.A., et al, [1984, p.72-78, rus] 41-2355
- Rock glaciers. Gorbunov, A.P., et al, [1986, p.73-77, rus] 41-2535
- Glaciers, subglacial taliks and perennially frozen rocks. Romanovskii, N.N., et al, [1986, p.206-219, rus] 41-2842
- Using satellite survey data for studying mass transfer in glacial systems. Nosenko, G.A., [1986, p.26-31, rus] 41-3211
- Tbilisa Glacier (glaciological and hydrometeorological investigations). Giginishvili, G.N., ed, [1986, 116p., rus] 41-3367
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481
- Ice thickness and structure of the Vernagferner, Austrian Alps. Blindow, N., et al, [1986, p.43-60, eng] 41-3525
- Estimating atmospheric refraction over Columbia Glacier. Rasmussen, L.A., [1986, p.61-72, eng] 41-3526
- Glacier dam on the Rio Pliome: a cyclic phenomenon. Del Rosario Prieto, M., [1986, p.73-78, eng] 41-3527
- Mechanism of basal ice layer formation. Tison, J.L., et al, [1987, p.47-50, eng] 41-3594
- Buried Pleistocene glacier ice on the Yenisey River. Astakhov, V.I., [1986, p.286-295, eng] 41-3619
- Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, [1986, 136p., rus] 41-3805
- Calculation of ice volume of some mountain glaciers. Bakov, E.K., [1986, p.3-11, rus] 41-3806
- Structural and morphological characteristics of Soler Glacier, Patagonia. Anyia, M., et al, [1987, p.69-77, eng] 41-3829
- Dendrochronologies of San Rafael and Soler areas, Patagonia. Sweda, T., et al, [1987, p.125-132, eng] 41-3837
- Hydrometeorological regime and dynamics of Lake Issyk-Kul'. Pomortsev, O.A., ed, [1988, 153p., rus] 41-3870
- First glaciological expedition to West Kunlun Mountains 1985. Watanabe, O., et al, [1987, p.77-84, eng] 41-3918
- Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124
- Reconstruction of environmental conditions of the north slope glaciers of the Terskey Ala-Tau Range from dendrologic data. Solomina, O.N., et al, [1987, p.235-242, rus] 41-4153
- Glacial ice profiling using VLF measurements. Thiel, D.V., [1986, p.376-382, eng] 41-4292
- Analysis and computation of regimes of major mountain glacier systems. Krenke, A.N., [1986, p.4-9, 125-130, rus] 41-4332
- Mass balance of the McCall glacier in Alaska. Trabant, D.C., et al, [1986, p.40-49, 157-165, rus] 41-4338
- Meltwater seepage on temperate and cold glaciers. Bazhev, A.B., [1986, p.50-55, 165-170, rus] 41-4339
- Glacier mass balance and river runoff in Central Asia. Akbarov, A.A., et al, [1986, p.56-59, 170-173, rus] 41-4340
- Forecasting glacial runoff in river basins of Central Asia. Konovalov, V.G., [1986, p.75-78, 187-191, rus] 41-4344
- Airborne radio echo-sounding in Shirase Glacier basin. Mac, S., et al, [1987, p.160-165, eng] 41-4451
- Pseudomonas bacteria from an antarctic glacial ice sheet. Sorokina, T.A., et al, [1987, p.288-297, eng] 41-4610



**Glacier mass balance**

- Calculation and prediction of the regime and distribution of mountain glaciers. Tokmagambetov, G.A., et al., [1985, 159p., rus] **41-518**
- Glaciological field work and remote sensing, West Greenland. Thomsen, H.H., [1985, p.95-99, eng] **41-573**
- Runoff in relation to hydroelectric stations, W. Greenland. Thomsen, H.H., et al., [1985, p.100-103, eng] **41-574**
- Glaciological investigations in 1984 at Tasersiaq and Qapiarfiup sermia, West Greenland. Olesen, O.B., [1985, p.104-107, eng] **41-575**
- Glacier-climate investigations in 1984, West Greenland. Braithwaite, R.J., [1985, p.108-111, eng] **41-576**
- Follow-up measurements of Pasterze (Glockner group) in 1984. Wakonig, H., [1984, p.223-228, ger] **41-637**
- Cirque glacier mass balance, Torgat Mts. Labrador. Rogerson, R.J., [1986, p.41-680, eng] **41-680**
- Glacier volume estimation on Cascade volcanoes. Driedger, C., et al., [1986, p.59-64, eng] **41-739**
- Recession of Grasshopper Glacier, Montana since 1898. Ferrigno, J.G., [1986, p.65-68, eng] **41-740**
- Glacier mapping to confirm results from mass-balance measurements. Haakensen, N., [1986, p.73-77, eng] **41-742**
- Response time of glaciers in Iceland to changes in climate. Johannesson, T., [1986, p.100-101, eng] **41-748**
- Glacier mapping for an inventory of the Indus drainage basin. Kick, W.J., [1986, p.102-105, eng] **41-749**
- Changes of Nordbogensletcher and Nordgletscher, Greenland. Knudsen, N.T., [1986, p.106-110, eng] **41-750**
- Mapping Canada's glaciers. Ommanney, C.S.L., [1986, p.132-134, eng] **41-755**
- Repeated glacier mapping for hydrological purposes: water power planning. Ostrem, G., [1986, p.135-140, eng] **41-756**
- Changes in volume and elevation of glaciers, Vernagtferner, Austria. Reinhardt, W., et al., [1986, p.151-155, eng] **41-759**
- Mapping of the margin of the inland ice, W. Greenland. Thomsen, H.H., [1986, p.164-167, eng] **41-762**
- Ice divide at Blue Glacier, U.S.A. Waddington, E.D., et al., [1986, p.175-176, eng] **41-764**
- Topography in the ablation area of the Khumbu Glacier, Nepal. Watanabe, O., et al., [1986, p.177-180, eng] **41-765**
- Glacier oscillation and glacier inventories of Iceland. Williams, R.S., Jr., [1986, p.184-191, eng] **41-767**
- Glacier variations during 1964-1983. Rist, S., [1984, p.173-179, ice] **41-810**
- Computations of mass balance in glacier systems. Diurgerov, M.B., [1986, p.8-15, 144-148, eng] **41-1047**
- Meteorological conditions of glacier mass balance extremes. Kuhn, M., [1986, p.15-19, 149-153, eng] **41-1048**
- Indirect methods of studying glacier mass balance. Vallon, M., et al., [1986, p.20-25, 153-157, eng] **41-1049**
- New method of using glaciers in monitoring climatic changes. Koerner, R.M., [1986, p.47-52, 175-179, eng] **41-1054**
- Role of evaporation from snow and ice in mass balance of glaciers. Kaser, G., [1986, p.59-63, 185-188, eng] **41-1056**
- Impact of meteorological conditions on mass balance of glaciers. Ohata, T., et al., [1986, p.63-67, 188-191, eng] **41-1057**
- New Zealand glaciers. Fitzharris, B.B., et al., [1986, p.84-89, 206-208, eng] **41-1058**
- Formulas for calculating glacier mass balance. Xie, Z., et al., [1986, p.105-110, 223-227, eng] **41-1062**
- New method of calculating glacier mass balance. Valdeev, A.E., [1986, p.110-111, 229-229, eng] **41-1063**
- Comparing mass-balance components of valley glaciers in temperate latitudes. Menashutin, V.M., [1986, p.112-116, 229-233, eng] **41-1064**
- Accounting for the ice formation types in predicting glacier mass balance from given parameters of climatic forecasts. Davidovich, N.V., [1986, p.125-131, 241-247, eng] **41-1067**
- Effect of mass balance changes on fluctuations of an ice sheet interacting with the sea. Petrov, V.N., et al., [1986, p.131-136, 247-250, eng] **41-1068**
- Arapaho rock glacier, Front Range, Colorado, U.S.A.: a 25-year resurvey. Benedict, J.B., et al., [1986, p.349-352, eng] **41-1182**
- Mass balance and sliding velocity of the Puget lobe, Cordilleran ice sheet. Booth, D.B., [1986, p.269-280, eng] **41-1189**
- Fluctuations of glaciers 1975-1980. Haeberli, W., comp., [1985, 265p., + maps, eng] **41-1214**
- Glaciation level in West Greenland. Humlum, O., [1985, p.311-319, eng] **41-1250**
- Glacier mass balances in the Cajon del Rubio, Andes Centrales Argentinas. Leiva, J.C., et al., [1986, p.83-90, eng] **41-1307**
- New progress of glacier inventory in Tianshan Mountains. Liu, C., et al., [1986, p.167-170, chj] **41-1464**
- Distribution of existing glaciers in the Qaidam Basin. Yang, H., et al., [1986, p.171-175, chj] **41-1465**

- Some results and prospects for studying mass balance of glaciers (according to materials of a Hamburg seminar in 1983). Kotliakov, V.M., et al., [1986, p.179-193, rus] **41-1666**
- Comparison of glacier maps—a source of climatological information. Ostrem, G., et al., [1986, p.225-231, eng] **41-1881**
- Amundsen Sea sediment coring. Kellogg, T.B., et al., [1985, p.79-81, eng] **41-2635**
- Recent variations of glaciers in the Swiss Alps. Aellen, M., [1985, p.73-82, fre] **41-3176**
- Present trend of the glaciers of the Italian Alps. Zanoni, G., [1985, p.89-96, ita] **41-3178**
- Glaciological investigation on the Vedrette Alta and Vedrette Occidentale di Ries (Alto Adige/South Tyrol). Secchieri, F., et al., [1985, p.137-143, ita] **41-3181**
- Heat budget of the Ross drainage basin. Oerlemans, J., [1987, p.287-292, eng] **41-3285**
- Recent changes in a calving glacier, Austerdalsisen, Svartsen, Norway. Theakstone, W.H., et al., [1986, p.303-316, eng] **41-3562**
- Ice flow velocity at Lewis Glacier, East Africa. Hastenrath, S., [1987, p.79-82, eng] **41-3600**
- Ice streams draining into the Ross Ice Shelf. Shabtaie, S., et al., [1987, p.1311-1336, eng] **41-3764**
- Structural and morphological characteristics of Soler Glacier, Patagonia. Aniya, M., et al., [1987, p.69-77, eng] **41-3829**
- Characteristics of ice flow of Soler Glacier, Patagonia. Naruse, R., [1987, p.79-85, eng] **41-3830**
- Snow cover and dirt layer in the accumulation area of Yala Glacier, Nepal. Iida, H., et al., [1987, p.55-62, eng] **41-3916**
- Modern glaciers on the south slope of West Kunlun Mountains. Zhang, Z., et al., [1987, p.85-91, eng] **41-3919**
- Glacioclimatological research. Aver'ianov, V.G., [1986, p.86-91, eng] **41-3952**
- Inception, growth and decay of the Laurentide Ice Sheet. Andrews, J.T., et al., [1987, p.13-15, eng] **41-4096**
- Glacier mass balance measurements. Reynaud, L., et al., [1986, p.446-454, eng] **41-4300**
- Isotopic fractionation at the base of polar and sub-polar glaciers. Boulton, G.S., et al., [1986, p.475-485, eng] **41-4303**
- Analysis and computation of regimes of major mountain glacier systems. Krenke, A.N., [1986, p.4-9, 125-130, rus] **41-4332**
- Comparing glacio-hydrology of Swiss Alps and Tian Shan. Kang, E., [1986, p.9-18, 130-139, rus] **41-4333**
- Rock glaciers in the dry Andes. Liboutry, L., [1986, p.18-25, 139-144, rus] **41-4334**
- Influence of katabatic wind on snow and ice ablation. Ohata, T., [1986, p.25-29, 144-147, rus] **41-4335**
- Heat balance components of Tuyukau Glacier at different atmospheric circulations. Golovkova, R.G., et al., [1986, p.29-34, 148-152, rus] **41-4336**
- Mass balance of the McCall glacier in Alaska. Trabandt, D.C., et al., [1986, p.40-49, 157-165, rus] **41-4338**
- Glacier mass balance and river runoff in Central Asia. Akbarov, A.A., et al., [1986, p.56-59, 170-173, rus] **41-4340**
- Possible mechanism of surges originating in bodies of pulsating glaciers. Kazanskii, A.B., [1986, p.87-92, 200-205, rus] **41-4347**
- Diagnostics, statistical analysis and classification of instabilities in glacier dynamics. Rototaev, K.P., [1986, p.92-96, 205-209, rus] **41-4348**
- Snow and ice reflectance zones on glaciers. Hall, D.K., et al., [1987, p.104-108, eng] **41-4444**
- Glacier mass balance, SE Alaska and NW British Columbia. Pelto, M.S., [1987, p.189-194, eng] **41-4456**
- Glacier melting**
- Natural hazards caused by glaciers. Björnsson, H., et al., [1986, p.33-52, eng] **41-473**
- Sources of organic nitrogen, phosphorus and carbon in antarctic streams. Downes, M.T., et al., [1986, p.215-225, eng] **41-613**
- Accuracy of pH determination in glacial melt-waters. Metcalf, R.C., [1984, p.41-51, eng] **41-624**
- Role of debris cover in the thermal physics of glaciers. Bozhinski, A.N., et al., [1986, p.255-266, eng] **41-687**
- Glacial geologic processes. Drewry, D., [1986, 276p., eng] **41-963**
- Glacier dynamics of the Altai-Sayan Mountain System for the last 150 years. Reviakin, V.S., et al., [1986, p.95-99, 214-216, eng] **41-1060**
- Deglaciation of the mountainous region of NW Montana. Carrara, P.E., et al., [1986, p.317-325, eng] **41-1179**
- Antarctic stream ecosystems: variability in environmental properties and algal community structure. Howard-Williams, C., et al., [1986, p.511-544, eng] **41-1558**
- Decrease in glacier cover on the islands of the Eurasian Arctic during the 20th Century. Koriakin, V.S., [1986, p.157-165, eng] **41-2342**
- Alph River ecosystem in southern Victoria Land. Howard-Williams, C., et al., [1986, p.21-33, eng] **41-2871**
- Observed processes of glacial deposition in Glacier Bay, Alaska. Anderson, P.J., ed., [1986, 167p., eng] **41-2974**

- Hydrological characteristics of Soler Glacier drainage, Patagonia. Fukami, H., et al., [1987, p.91-96, eng] **41-3832**
- Rising sea level and collapsing antarctic ice. Hughes, T.J., [1987, p.89-100, eng] **41-4099**
- Moraines and surface melt on glaciers. Rogerson, R.J., et al., [1986, p.350-354, eng] **41-4287**
- Glacier movement**
- See: Glacier flow
- Glacier oscillation**
- Evolution of marginal zone of the Vitkovski Glacier (South Spitsbergen). Andrzejewski, L., et al., [1985, p.527-535, eng] **41-75**
- Glaciers of the Austrian Alps, 1983/84. Patzelt, G., [1984, p.207-221, ger] **41-636**
- Follow-up measurements of Pasterze (Glockner group) in 1984. Wakonig, H., [1984, p.223-228, ger] **41-637**
- Evolution of the Illecillewaet Glacier, Glacier National Park, B.C. Champoux, A.C., et al., [1986, p.31-33, eng] **41-733**
- Theodolite measurements of fast moving glaciers. Dahl-Jensen, D., et al., [1986, p.42-46, eng] **41-736**
- Recession of Grasshopper Glacier, Montana since 1898. Ferrigno, J.G., [1986, p.65-68, eng] **41-740**
- Glacier oscillation and glacier inventories of Iceland. Williams, R.S., Jr., [1986, p.184-191, eng] **41-767**
- Glacier outlet of the Vatnajökull in the upper course of the Djupa, southern Iceland. Jakobs, K., [1984, p.97-103, ger] **41-805**
- Glacier variations during 1964-1983. Rist, S., [1984, p.173-179, ice] **41-810**
- Glacial history of NE Wisconsin and Upper Michigan. Peterson, W.L., [1986, 14p., eng] **41-974**
- Recent changes in the glaciers of Heard Island. Allison, I.F., et al., [1986, p.255-271, eng] **41-1020**
- Computations of mass balance in glacier systems. Diurgerov, M.B., [1986, p.8-15, 144-148, eng] **41-1047**
- Recent fluctuations of mountain glaciers in the Northern Hemisphere. Makarevich, K.G., et al., [1986, p.25-33, 157-163, eng] **41-1050**
- Induced fluctuations of the Shumskiy glacier in Dzhungarskiy Alatau. Cherkasov, P.A., et al., [1986, p.38-44, 168-173, eng] **41-1052**
- Calculating basic characteristics of mountain glaciers under climatic changes. Glazyrin, G.E., [1986, p.44-47, 173-175, eng] **41-1053**
- Influence of large-scale atmospheric processes on the fluctuations of glaciers. Denisova, T.I.A., et al., [1986, p.52-58, 179-185, eng] **41-1055**
- Impact of meteorological conditions on mass balance of glaciers. Ohata, T., et al., [1986, p.63-67, 188-191, eng] **41-1057**
- Fluctuations of Heard Island glaciers and related climatic changes. Allison, A., et al., [1986, p.89-95, 209-214, eng] **41-1059**
- Glacier dynamics of the Altai-Sayan Mountain System for the last 150 years. Reviakin, V.S., et al., [1986, p.95-99, 214-216, eng] **41-1060**
- Regularities governing glacier fluctuations in the Eurasian Arctic. Kislov, A.V., et al., [1986, p.120-125, 236-241, eng] **41-1066**
- Glacier variations and their causes, Patagonia, Chile. Aniya, M., et al., [1986, p.307-316, eng] **41-1178**
- Deglaciation of the mountainous region of NW Montana. Carrara, P.E., et al., [1986, p.317-325, eng] **41-1179**
- Moraine stratigraphy of Bugaboo Glacier, British Columbia. Osborn, G., [1986, p.171-178, eng] **41-1190**
- Fluctuations of glaciers 1975-1980. Haeberli, W., comp., [1985, 265p., + maps, eng] **41-1214**
- Tree-ring analysis of movement of a rock glacier, Mount Meestas, CO. Giardino, J.R., et al., [1984, p.299-309, eng] **41-1232**
- Neoglacial advance of the Boundary Glacier, Banff National Park. Gardner, J.S., et al., [1985, p.1753-1755, eng] **41-1240**
- Beach changes from retreating glacier ice in South Georgia. Gordon, J.E., et al., [1986, p.15-24, eng] **41-1844**
- Glaciomarine facies in northern Ireland. McCabe, A.M., [1986, p.880-894, eng] **41-1862**
- Neoglaciation in the Coast Mts., B.C., Canada. Ryder, J.M., et al., [1986, p.273-287, eng] **41-1928**
- Measuring glacier fluctuation. Clarke, G.K.C., et al., [1986, p.727-733, eng] **41-1931**
- Decrease in glacier cover on the islands of the Eurasian Arctic during the 20th Century. Koriakin, V.S., [1986, p.157-165, eng] **41-2342**
- Melting glaciers pull the plug on volcanoes. Anderson, I., [1987, p.30, eng] **41-2365**
- Dating of the Little Ice Age glacier advance, SW Norway. Matthews, J.A., et al., [1986, p.369-375, eng] **41-2472**
- Reconstruction of Little Ice Age events in the Canadian Rocky Mountains. Luckman, B.H., [1986, p.17-28, eng] **41-2703**
- Holocene paleohydrology of the St. Elias Mountains, British Columbia and Yukon. Johnson, P.G., [1986, p.47-53, eng] **41-2706**
- Push-moraines and glacier-contact fans in marine and terrestrial environments. Boulton, G.S., [1986, p.677-698, eng] **41-3072**

**Glacier oscillation (cont.)**

- Fluctuation of alpine glaciers during the last 30 yrs. [1985, p.65-214, ita] **41-3174**
- Recent variations of glaciers in the Swiss Alps. Aellen, M., [1985, p.73-82, fre] **41-3176**
- Could the water redding of Lake Tovel (Trentino, Italy) be related to fluctuations of Alpine glaciers. Paganelli, A., [1985, p.83-88, ita] **41-3177**
- Present trend of the glaciers of the Italian Alps. Zanoni, G., [1985, p.89-96, ita] **41-3178**
- Climatic parameters and glacial fluctuations in the period 1950-1982. Belloni, S., et al, [1985, p.97-123, ita] **41-3179**
- Glacial and climatic fluctuations during the last century in the Mont Blanc and Monte Rosa groups. Cerutti, A.V., [1985, p.124-136, ita] **41-3180**
- Glacier inventory of the province of Bolzano. Valentini, P., [1985, p.182-195, ita] **41-3186**
- Soviet Glacier Inventory and present glaciation of the Akkem Valley (Altai, Southern Siberia). Smiraglia, C., [1985, p.196-204, ita] **41-3187**
- Glacier-dammed lake investigations in the Hullet Lake area, South Greenland. Dawson, A.G., [1983, 24p., eng] **41-3302**
- Fluctuations of the Río del Plomo glaciers. Espíza, L.E., [1986, p.317-327, eng] **41-3563**
- Holocene glacier fluctuations. Osborn, G., et al, [1987, p.26-28, eng] **41-4098**
- Glacier mass balance measurements. Reynaud, L., et al, [1986, p.446-454, eng] **41-4300**
- Recent fluctuations of Rakhiot Glacier, Nanga Parbat, Punjab Himalaya, Pakistan. Gardner, J.S., [1986, p.527-529, eng] **41-4308**
- Comparing glacio-hydrology of Swiss Alps and Tian Shan. Kang, E., [1986, p.9-18, 130-139, rus] **41-4333**
- Diagnostics, statistical analysis and classification of instabilities in glacier dynamics. Rototae, K.P., [1986, p.92-96, 205-209, rus] **41-4348**
- Modeling glacier surges and climatically induced fluctuations. Mazo, V.B., et al, [1986, p.97-102, 210-214, rus] **41-4349**
- Glacier surfaces**
- Wind regime over Golubin glacier during the ablation period. Kurochkin, I.U.N., [1986, p.170-174, rus] **41-129**
- Finite element modeling of glaciers. Nixon, W.A., et al, [1985, p.11, 303-11, 311, eng] **41-495**
- Mapping of Soler Glacier, Chile. Aniya, M., et al, [1986, p.8-10, eng] **41-729**
- Surface and bedrock topography of icecaps in Iceland. Björnsson, H., [1986, p.11-18, eng] **41-730**
- Theodolite measurements of fast moving glaciers. Dahl-Jensen, D., et al, [1986, p.42-46, eng] **41-736**
- Mapping of the Nordaustlandet ice caps. Dowdeswell, J.A., et al, [1986, p.51-58, eng] **41-738**
- Seasat range measurements verified on a D-D ice sheet. Gundestrup, N.S., et al, [1986, p.69-72, eng] **41-741**
- Glacier mapping to confirm results from mass-balance measurements. Haakensen, N., [1986, p.73-77, eng] **41-742**
- Use of LANDSAT digital data in glacier inventory. Howarth, P.J., et al, [1986, p.90-92, eng] **41-745**
- Changes of Nordbogletscher and Nordgletscher, Greenland. Knudsen, N.T., [1986, p.106-110, eng] **41-750**
- Velocity measurements on Dagaard-Jensen Glacier, Scoresbysund, East Greenland. Reeh, N., et al, [1986, p.146-150, eng] **41-758**
- Influence of moraines on turbidity of glacial waters. Tikhonovskaya, A.A., et al, [1986, p.123-128, rus] **41-783**
- Role of evaporation from snow and ice in mass balance of glaciers. Kaser, G., [1986, p.59-63, 185-188, eng] **41-1056**
- Calculating runoff from the Tadjikistan glaciers. Musoev, Z., [1986, p.131-135, rus] **41-1654**
- Man vs. McKinley. Dixon, C., et al, [1986, p.2-8, eng] **41-1841**
- Glacier training. Hook, C., [1986, p.11, eng] **41-1842**
- Glaciogeophysical survey of the Ross Embayment, 1984-1985. Bentley, C.R., et al, [1985, p.63-64, eng] **41-2626**
- Velocity and altitude of Hubbard Glacier, Alaska, Aug. 1978. Krimmel, R.M., et al, [1986, 13p., eng] **41-3227**
- Behavior of Columbia Glacier, Alaska. Meier, M.F., et al, [1985, 41p. + 8 maps, eng] **41-3403**
- Meteorological measurements at Soler Glacier, Patagonia, in 1985. Fukami, H., et al, [1987, p.31-36, eng] **41-3825**
- Glaciological characteristics of an ice core in Patagonia. Yamada, T., [1987, p.59-67, eng] **41-3828**
- Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield. Naruse, R., et al, [1987, p.133-140, eng] **41-3838**
- Formation of dirt layers and surface dust by micro-plants in Yala Glacier, Nepal. Kohshima, S., [1987, p.63-68, eng] **41-3917**
- Rock avalanche from the peak of Mount Meager, British Columbia. Evans, S.G., [1987, p.929-933, eng] **41-4017**

- Isotropic points on glaciers. Nye, J.F., [1986, p.363-365, eng] **41-4289**
- Recent fluctuations of Rakhiot Glacier, Nanga Parbat, Punjab Himalaya, Pakistan. Gardner, J.S., [1986, p.527-529, eng] **41-4308**
- Influence of katabatic wind on snow and ice ablation. Ohata, T., [1986, p.25-29, 144-147, rus] **41-4335**
- Internal reflecting horizons in Spitsbergen glaciers. Bamber, J.L., [1987, p.5-10, eng] **41-4427**
- Comparison between the cracks of landslide debris and glacier cracks. Fujita, Y., [1985, p.49-55, jpn] **41-4590**
- Glacier surges**
- Strain anomalies during surges of Variegated Glacier, Alaska. Raymond, C.F., et al, [1986, p.178-191, eng] **41-677**
- Water discharge during surges of Variegated Glacier, Alaska. Humphrey, N., et al, [1986, p.195-207, eng] **41-679**
- Motion events on Variegated Glacier, Alaska. Harrison, W.D., et al, [1986, p.82-89, eng] **41-744**
- Tungnarijokull profile surveys 1959-1979. Freysteinson, S., [1984, p.131-139, ice] **41-806**
- Hydraulic effects at the glacier bed and related phenomena. [1986, 148p., eng] **41-961**
- Behavior of the Medvezhiy glacier during 1982-1984. Butnitskii, A.B., et al, [1986, p.99-106, rus] **41-1647**
- Landforms and sediments produced by glaciers in Iceland. Sharp, M.J., [1982, 380p. + append., eng] **41-3141**
- Glacier dam on the Río Plomo: a cyclic phenomenon. Del Rosario Prieto, M., [1986, p.73-78, eng] **41-3527**
- Fluctuations of the Río del Plomo glaciers. Espíza, L.E., [1986, p.317-327, eng] **41-3563**
- Accelerated motion in a glacier approaching surge. Kamb, B., et al, [1987, p.27-46, eng] **41-3593**
- 1985 surge and ice dam of Glacier Grande del Nevado del Plomo, Argentina. Bruce, R.H., et al, [1987, p.131-132, eng] **41-3607**
- Recent retreat of Soler Glacier, Patagonia as seen from vegetation recovery. Sweda, T., [1987, p.119-124, eng] **41-3836**
- Modern glaciers on the south slope of West Kunlun Mountains. Zhang, Z., et al, [1987, p.85-91, eng] **41-3919**
- Quaternary glaciation and paleogeography of West Kunlun Mountains. Zheng, B., [1987, p.93-102, eng] **41-3920**
- Possible mechanism of surges originating in bodies of pulsating glaciers. Kazanski, A.B., [1986, p.87-92, 200-205, rus] **41-4347**
- Diagnostics, statistical analysis and classification of instabilities in glacier dynamics. Rototae, K.P., [1986, p.92-96, 205-209, rus] **41-4348**
- Modeling glacier surges and climatically induced fluctuations. Mazo, V.B., et al, [1986, p.97-102, 210-214, rus] **41-4349**
- Glacier surveys**
- Surface velocity determination on large polar glaciers by aerial photogrammetry. Brecher, H.H., [1986, p.22-26, eng] **41-412**
- Symposium on Glacier Mapping and Surveying, Reykjavik, 1985. [1986, 216p., eng] **41-727**
- History of mapping in Iceland, with special reference to glaciers. Tómasson, H., [1986, p.4-7, eng] **41-728**
- Glacier mapping in Glacier National Park, B.C. Champoux, A.C., et al, [1986, p.27-30, eng] **41-732**
- Evolution of the Illecillewaet Glacier, Glacier National Park, B.C. Champoux, A.C., et al, [1986, p.31-33, eng] **41-733**
- Map of the Mount Gongga Glacier. Chen, J., [1986, p.34-36, eng] **41-734**
- Digital mapping in polar regions from Landsat photographic products: a case study. Dowdeswell, J.A., et al, [1986, p.47-50, eng] **41-737**
- Mapping of the Nordaustlandet ice caps. Dowdeswell, J.A., et al, [1986, p.51-58, eng] **41-738**
- Seasat range measurements verified on a D-D ice sheet. Gundestrup, N.S., et al, [1986, p.69-72, eng] **41-741**
- Glacier mapping to confirm results from mass-balance measurements. Haakensen, N., [1986, p.73-77, eng] **41-742**
- Mapping buried glacier ice, Monte Rosa, Italian Alps. Haeblerli, W., et al, [1986, p.78-81, eng] **41-743**
- Use of LANDSAT digital data in glacier inventory. Howarth, P.J., et al, [1986, p.90-92, eng] **41-745**
- High-precision distance measurement with an unmanned moving target. Ito, H., et al, [1986, p.93-95, eng] **41-746**
- Response time of glaciers in Iceland to changes in climate. Johannesson, T., [1986, p.100-101, eng] **41-748**
- Glacier mapping for an inventory of the Indus drainage basin. Kick, W.J., [1986, p.102-105, eng] **41-749**
- Changes of Nordbogletscher and Nordgletscher, Greenland. Knudsen, N.T., [1986, p.106-110, eng] **41-750**
- Mapping glacio-nival systems of snow and ice resources. Kotliakov, V.M., et al, [1986, p.111-116, eng] **41-751**
- Ice velocity at the terminus of Columbia Glacier, Alaska. Krimmel, R.M., et al, [1986, p.117-123, eng] **41-752**
- Mapping Canada's glaciers. Ommanney, C.S.L., [1986, p.132-134, eng] **41-755**

- Repeated glacier mapping for hydrological purposes: water power planning. Östrem, G., [1986, p.135-140, eng] **41-756**
- Velocity measurements on Dagaard-Jensen Glacier, Scoresbysund, East Greenland. Reeh, N., et al, [1986, p.146-150, eng] **41-758**
- Changes in volume and elevation of glaciers, Vernagtferner, Austria. Reinhardt, W., et al, [1986, p.151-155, eng] **41-759**
- Radio echo-sounding on Jostedalbreen, Norway. Saetang, A.C., et al, [1986, p.156-158, eng] **41-760**
- Mapping of the margin of the inland ice, W. Greenland. Thomsen, H.H., [1986, p.164-167, eng] **41-762**
- Glacier mapping of rock glaciers, moraines and buried ice. Whalley, W.B., et al, [1986, p.181-183, eng] **41-766**
- Glacier oscillation and glacier inventories of Iceland. Williams, R.S., Jr., [1986, p.184-191, eng] **41-767**
- Cartographic methods for large-scale glacier maps. Yin, S., et al, [1986, p.192-195, eng] **41-768**
- Tungnarijokull profile surveys 1959-1979. Freysteinson, S., [1984, p.131-139, ice] **41-806**
- Seismic activities in Vatnajökull, Iceland. Brandsdóttir, B., [1984, p.141-150, eng] **41-807**
- Computations of mass balance in glacier systems. Diurgerov, M.B., [1986, p.8-15, 144-148, eng] **41-1047**
- New method of using glaciers in monitoring climatic changes. Koerner, R.M., [1986, p.47-52, 175-179, eng] **41-1054**
- Recent glacier oscillations in China. Zhang, X., [1986, p.99-105, 217-223, eng] **41-1061**
- Formulas for calculating glacier mass balance. Xie, Z., et al, [1986, p.105-110, 223-227, eng] **41-1062**
- Comparing mass-balance components of valley glaciers in temperate latitudes. Menshutin, V.M., [1986, p.112-116, 229-233, eng] **41-1064**
- Stresses in the upper layer of the Hans Glacier, Spitsbergen. Cichowicz, A., [1986, p.13-19, eng] **41-1253**
- Movement on the ice front. Gellatly, A., et al, [1986, p.294-299, eng] **41-1512**
- Desiccation processes in the Werenskiöld Glacier forefield, W Spitsbergen. Cegla, J., [1986, p.5-24, eng] **41-1549**
- Glaciogeophysical survey of the Ross Embayment, 1984-1985. Bentley, C.R., et al, [1985, p.63-64, eng] **41-2626**
- Satellite remote sensing technique for study of alpine glaciers. Della Ventura, A., et al, [1987, p.203-215, eng] **41-2763**
- Fluctuation of alpine glaciers during the last 30 yrs. [1985, p.65-214, ita] **41-3174**
- Glaciological research: trends and proposals. Saibene, C., [1985, p.68-72, ita] **41-3175**
- Glaciological investigation on the Vedretta Alta and Vedretta Occidentale di Ries (Alto Adige/South Tyrol). Secchieri, F., et al, [1985, p.137-143, ita] **41-3181**
- Satellite monitoring of Alpine glacier fluctuations. Della Ventura, A., et al, [1985, p.150-155, ita] **41-3183**
- Problems arising from collection and interpretation of data for a new glacier inventory. Secchieri, F., [1985, p.156-165, ita] **41-3184**
- Problems and indications for a new inventory of Italian glaciers based on comparison between the Italian Inventory of 1959-62 and the World Glacier Inventory. Belloni, S., et al, [1985, p.166-181, ita] **41-3185**
- Glacier inventory of the province of Bolzano. Valentini, P., [1985, p.182-195, ita] **41-3186**
- Soviet Glacier Inventory and present glaciation of the Akkem Valley (Altai, Southern Siberia). Smiraglia, C., [1985, p.196-204, ita] **41-3187**
- Outline of the Glaciological Research Project in Patagonia, 1985-1986. Nakajima, C., [1987, p.1-6, eng] **41-3821**
- Coastline changes revealed by satellite imagery. Ferrigno, J.G., et al, [1987, p.577-583, eng] **41-3856**
- Simulation of Erebus Glacier Tongue thermal regime. Stolle, D.F.E., et al, [1986, p.530-534, eng] **41-4309**
- Internal reflecting horizons in Spitsbergen glaciers. Bamber, J.L., [1987, p.5-10, eng] **41-4427**
- Snow and ice reflectance zones on glaciers. Hall, D.K., et al, [1987, p.104-108, eng] **41-4444**
- Satellite remote sensing of Vatnajökull, Iceland. Williams, R.S., Jr., [1987, p.127-135, eng] **41-4447**
- Radio echo soundings of sub-polar glaciers in Svalbard. Kotliakov, V.M., et al, [1987, p.151-159, eng] **41-4450**
- Synthetic aperture radar for snow and glacier surveying. Rott, H., et al, [1987, p.195-199, eng] **41-4457**
- Glacier thickness**
- Ice thickness measurements by magnetic surveys. Thorning, L., [1985, p.112-114, eng] **41-577**
- Surface and bedrock topography of icecaps in Iceland. Björnsson, H., [1986, p.11-18, eng] **41-730**
- Glacier volume estimation on Cascade volcanoes. Driedger, C., et al, [1986, p.59-64, eng] **41-739**
- Seasat range measurements verified on a D-D ice sheet. Gundestrup, N.S., et al, [1986, p.69-72, eng] **41-741**
- Changes in volume and elevation of glaciers, Vernagtferner, Austria. Reinhardt, W., et al, [1986, p.151-155, eng] **41-759**

- Radio echo-sounding on Jostedalbreen, Norway. Saetrand, A.C., et al, [1986, p.156-158, eng] 41-760
- Glacier variations during 1964-1983. Rist, S., [1984, p.173-179, ice] 41-810
- Fluctuations of glaciers 1975-1980. Haeberli, W., comp, [1985, 265p. + maps, eng] 41-1214
- Ice thickness deduced from gravity anomalies in Patagonia. Casassa, G., [1987, p.43-57, eng] 41-3827
- Glacial ice profiling using VLF measurements. Thiel, D.V., [1986, p.376-382, eng] 41-4292
- Internal reflecting horizons in Spitsbergen glaciers. Bamber, J.L., [1987, p.5-10, eng] 41-4427
- Stagnant ice at the bed of White Glacier, Axel Heiberg Island, N.W.T., Canada. Blatter, H., [1987, p.35-38, eng] 41-4431
- Radio echo soundings of sub-polar glaciers in Svalbard. Kotliakov, V.M., et al, [1987, p.151-159, eng] 41-4450
- See also: Ice cover thickness
- Glacier tongues**
- Explanatory text to the map of Lewis Glacier, Mount Kenya, 1983. Patzelt, G., et al, [1984, p.177-195, ger] 41-634
- Glaciers of the Austrian Alps, 1983/84. Patzelt, G., [1984, p.207-221, ger] 41-636
- Climatic parameters and glacial fluctuations in the period 1950-1982. Belloni, S., et al, [1985, p.97-123, ita] 41-3179
- Peat formation of the Rutor Glacier (Aosta Valley). Results obtained by palynostratigraphic study of new peat outcrops near the glacier snout. Armando, E., et al, [1985, p.144-149, ita] 41-3182
- Aerial surveys over the Patagonia Icefields. Aniya, M., [1987, p.157-161, eng] 41-3841
- Simulation of Erebus Glacier Tongue thermal regime. Stolle, D.F.E., et al, [1986, p.530-534, eng] 41-4309
- Stagnant ice at the bed of White Glacier, Axel Heiberg Island, N.W.T., Canada. Blatter, H., [1987, p.35-38, eng] 41-4431
- Glacier variations**
- See: Glacier oscillation
- Glaciers**
- Icebergs: a bibliography relevant to eastern Canadian waters. Howard, L.M., ed, [1986, 277p., eng] 41-271
- Design, development and deployment of instrument packages to monitor the motion of glacial ice masses at sea. Lever, J.H., et al, [1986, p.225-236, eng] 41-1594
- Model of Pleistocene glaciation of the system "glaciers-ocean-troposphere-atmosphere". Karachenov, A.T., [1986, p.38-45, rus] 41-1635
- Climatic handbook for Glacier National Park. Finklin, A.T., [1986, 124p., eng] 41-2183
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270
- Wright Glacier volcanic plug and dike swarm, southeastern Alaska. Ford, A.B., et al, [1987, p.116-118, eng] 41-3467
- Reserved zones of Franz Josef Land. Uspenskii, S.M., et al, [1986, p.7-18, rus] 41-3861
- Lacustrine and river geosystems of the Oktyabr'skaya Revolyutsiya Islands (Severnaya Zemlya). Mordvinov, A.A., [1986, p.30-41, rus] 41-3864
- See also: Cirque glaciers; Mountain glaciers; Rock glaciers
- Glaciology**
- Glacier-climate investigations in 1984, West Greenland. Braithwaite, R.J., [1985, p.108-111, eng] 41-576
- World Data Center A for Glaciology: activities and services. Brennan, A.M., [1986, p.131-138, eng] 41-971
- JARE 25 wintering party activities, 1984-1985. Hirasawa, T., [1986, p.113-137, jpn] 41-980
- Paleoglacial traces and series of mutiglaciation in the Luojishan Mountain. Cui, Z., et al, [1986, p.107-118, chi] 41-1458
- Cartographic problems of applied glaciology. Alekseev, V.R., [1986, p.144-146, rus] 41-1657
- Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al, [1986, p.199-228, rus] 41-1668
- Physics of ice: some fundamentals of planetary glaciology. Whalley, E., [1985, p.9-37, eng] 41-1694
- Role of Soviet academicians during WW2. Kotliakov, V.M., et al, [1986, p.19-25, rus] 41-1819
- Operating of the Antarctic icebreaker *Shirase* and traverse by snow vehicle. Ishizawa, K., [1986, p.563-578, eng] 41-2046
- Geocryological research. Ershov, E.D., ed, [1986, 224p., rus] 41-2080
- Geocryology—its subject and problems. Danilov, I.D., [1986, p.18-26, rus] 41-2082
- Conditions of upbuilding and properties of artificial sea-water ice. Gagarin, V.E., et al, [1986, p.140-146, rus] 41-2167
- Glacial giants. History of origin, existence and deterioration of great glaciers. Balandin, R.K., [1986, 175p., rus] 41-2252
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskii, M.I.A., et al, [1986, 133p., rus] 41-2253
- Antarctic ice sheet studies: results and plans. Aver'yanov, V.G., et al, [1984, p.79-85, rus] 41-2356
- Fluctuation of alpine glaciers during the last 30 yrs. [1985, p.65-214, ita] 41-3174
- Recent variations of glaciers in the Swiss Alps. Aellen, M., [1985, p.73-82, fre] 41-3176
- Present trend of the glaciers of the Italian Alps. Zanoni, G., [1985, p.89-96, ita] 41-3178
- Ice Island underfoot. Chilingarov, A., et al, [1986, 175p., rus] 41-3250
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270
- Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1985, 259p., rus] 41-3534
- Oxygen-isotope composition in the ocean-glacier system. Nikolaev, V.I., et al, [1985, p.172-174, rus] 41-3538
- Proceedings of the Eighth Symposium on Polar Meteorology and Glaciology. Kawaguchi, S., ed, [1986, 113p., eng] 41-3653
- Outline of the Glaciological Research Project in Patagonia, 1985-1986. Nakajima, C., [1987, p.1-6, eng] 41-3821
- Aerial surveys over the Patagonia Icefields. Aniya, M., [1987, p.157-161, eng] 41-3841
- First glaciological expedition to West Kunlun Mountains 1985. Watanabe, O., et al, [1987, p.77-84, eng] 41-3918
- Ice and hydropower. Thomsen, H.H., [1986, 73p., dan] 41-3960
- Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124
- Last interglacial/glacial cycle in Greenland. Funder, S., [1984, p.261-278, eng] 41-4324
- Proceedings of the Second Symposium on Remote Sensing in Glaciology. [1987, 264p., eng] 41-4425
- Glaciological investigations using the synthetic aperture radar imaging system. Bindshadler, R.A., et al, [1987, p.11-19, eng] 41-4428
- Interface tracking in digitally recorded glaciological data. Cooper, A.P.R., [1987, p.50-54, eng] 41-4434
- Satellite remote sensing of Vatnajökull, Iceland. Williams, R.S., Jr., [1987, p.127-135, eng] 41-4447
- Activities of the Research Institute for Hazards in Snowy Areas, Japan. [1985, p.127-160, jpn] 41-4594
- Glass**
- Glass freezing as kinetics time scale singularity of new significance. Larsen, U., [1986, p.248-253, eng] 41-1621
- Glass fibers**
- Excess loss of single-mode jacketed optical fiber at low temperature. Yabuta, T., et al, [1983, p.2356-2362, eng] 41-486
- Glaze**
- Influence of thermoinsulating layers on temperature regime of road pavements. Dulshenaliev, M., [1984, p.140-145, rus] 41-786
- Ice adhesion to structural materials. Kozlovskaya, R.T., et al, [1982, p.96-101, rus] 41-1274
- Surface icing of different materials. Golubev, V.N., [1986, p.121-128, rus] 41-2164
- Measurement of the entrapment of sulfur dioxide by rime ice. Lamb, D., et al, [1987, p.1765-1772, eng] 41-4538
- Gold**
- Biochemical indications of gold-ore deposits in permafrost. Ursova, O.A., [1986, p.226-227, rus] 41-202
- Grain size**
- Ice lensing in layered soils. Penner, E., [1986, p.334-340, eng] 41-1159
- Frost heaving classifications of the coarse grained soil. Wang, Z., [1986, p.195-200, chi] 41-1415
- Fracture toughness of ice over a range of grain sizes. Nixon, W.A., et al, [1985, 10p. + figs., eng] 41-1680
- Evolution of ices from interstellar space to the solar system. Greenberg, J.M., et al, [1985, p.185-204, eng] 41-1705
- Observations of grain boundary sliding in ice bicrystals. Graves, J.H., [1986, c12p., eng] 41-2133
- Textures and fabrics of 700-m deep ice core from Mizuho Station. Narita, H., et al, [1986, p.74-77, eng] 41-3660
- Infrared measurement of free-water content and grain size of snow. Hyvärinen, T., et al, [1987, p.342-348, eng] 41-3780
- Grain growth in a wet arctic snow cover. Marsh, P., [1987, p.23-31, eng] 41-4213
- Grain growth in polar ice: Pts. 1 and 2. Alley, R.B., et al, [1986, p.415-433, eng] 41-4297
- Crystallography of Patterned Lake, Framnes Mountains. Chambers, J.L.C., et al, [1986, p.520-526, eng] 41-4307
- Grasses**
- Forms of vascular plants in the southern tundra subzone of Taymyr. Polozova, T.G., [1986, p.122-134, rus] 41-1337
- Productivity of natural meadows in the upper Angara River delta. Kas'ianova, L.N., et al, [1986, p.78-83, rus] 41-1404
- Man-induced erosion in Bol'shezemel'skaya tundra. Zharkova, I.U.G., [1986, p.94-98, rus] 41-1794
- Impact of climate on grass growth, Iceland. Ogilvie, A.E.J., [1984, p.343-352, eng] 41-2008
- Dynamics of plant communities following the felling of forest. Ziabchenko, S.S., [1986, p.5-22, rus] 41-2374
- All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks. Novosibirsk, Aug. 26-28, 1986. Summaries. [1986, 165p., rus] 41-2456
- Mixed-grass-edge tundra soils of Wrangel Island. Orlovskii, S.-D.D., [1986, p.98, rus] 41-2460
- Problems of physical geography and geobotanics. Selected works. Sochava, V.B., [1986, 343p., rus] 41-2753
- Graupel**
- See: Snow pellets
- Gravel**
- Development of frost heave deformations in freezing, coarsely clastic ground. Petrova, M.A., et al, [1985, p.89-91, rus] 41-319
- Laboratory creep tests of frozen gravels. Huang, S.L., et al, [1986, p.101-104, eng] 41-1309
- Concretes with unsorted sand-gravel for cold regions. Sadovich, M.A., et al, [1986, p.50-53, rus] 41-1924
- Endicott slope protection design and construction. Munday, J.P., et al, [1987, p.47-54, eng] 41-2401
- Temperature and time effects on the closure of a gravel room in permafrost. Huang, S.L., [1985, p.53-65, eng] 41-2743
- Gravity**
- Japanese earth science research at McMurdo Sound, 1985-1986. Kaminuma, K., [1986, p.138-147, jpn] 41-981
- Processing gravity data using *Shirase* navigational information. Segawa, J., et al, [1986, p.13-18, eng] 41-1470
- Gravity anomalies**
- Comments on the antarctic gravity anomaly map. Segawa, J., et al, [1986, p.19-22, eng] 41-1471
- Grazing**
- Grazing research at northern latitudes. [1986, 374p., eng] 41-216
- Flora of the Kanin Peninsula. Sergienko, V.G., [1986, 147p., rus] 41-1084
- Preservation of high-altitude vegetation in the Altai-Sayan Mountains. Sedel'nikov, V.P., [1986, p.106-108, rus] 41-2461
- Problems of physical geography and geobotanics. Selected works. Sochava, V.B., [1986, 343p., rus] 41-2753
- Revegetation of West Siberian forests. Vorob'ev, V.N., ed, [1985, 103p., rus] 41-3979
- Great Lakes**
- Great Lakes climatological atlas. Saulesleja, A., ed, [1986, 145p., eng] 41-1577
- Marine meteorological and oceanographic products of the OPC. Feit, D.M., [1986, 105p., eng] 41-4156
- Under ice ecology pilot program, Great Lakes. Bolsenga, S.J., et al, [1986, 44p. + append., eng] 41-4581
- Greenland**
- Slopes and talus of NW Greenland. Malaure, J., [1985, p.63-79, fre] 41-374
- Glaciological field work and remote sensing, West Greenland. Thomsen, H.H., [1985, p.95-99, eng] 41-573
- Runoff in relation to hydroelectric stations, W. Greenland. Thomsen, H.H., et al, [1985, p.100-103, eng] 41-574
- Glaciological investigations in 1984 at Tasersiaq and Qapiarfup sermia, West Greenland. Olesen, O.B., [1985, p.104-107, eng] 41-575
- Glacier-climate investigations in 1984, West Greenland. Braithwaite, R.J., [1985, p.108-111, eng] 41-576
- Ice thickness measurements by magnetic surveys. Thorning, L., [1985, p.112-114, eng] 41-577
- Ice ablation in relation to climatic factors in W. Greenland. Braithwaite, R.J., et al, [1984, p.155-168, eng] 41-632
- Seasat range measurements verified on a D-D ice sheet. Gundestrup, N.S., et al, [1986, p.69-72, eng] 41-741
- Changes of Nordbogensletcher and Nordgletscher, Greenland. Knudsen, N.T., [1986, p.106-110, eng] 41-750
- Velocity measurements on Dagaard-Jensen Glacier, Scoresbysund, East Greenland. Reeh, N., et al, [1986, p.146-150, eng] 41-758
- Mapping of the margin of the inland ice, W. Greenland. Thomsen, H.H., [1986, p.164-167, eng] 41-762
- Traces of Icelandic eruptions in the Greenland Ice Sheet. Hammer, C.U., [1984, p.51-65, eng] 41-804
- Arctic radio wave propagation. Taagholt, J., [1985, p.(7.1)-(7.1)12, eng] 41-958
- Placers of cosmic dust in the blue ice lakes of Greenland. Maurette, M., et al, [1986, p.869-872, eng] 41-1070
- Ice-ocean modelling in the East Greenland area. Rasmussen, E.B., et al, [1986, p.380-398, eng] 41-1108
- Glaciation level in West Greenland. Humlum, O., [1985, p.311-319, eng] 41-1250
- Recommendations for a U.S. ice coring program. [1986, 67p., eng] 41-1352
- Sea ice modelling in the East Greenland area. Larsen, J., et al, [1986, p.147-156, eng] 41-1590
- Long-term record of H2O2 in polar ice cores. Nefel, A., et al, [1986, p.262-270, eng] 41-1756

## Greenland (cont.)

- Drilling offshore western Greenland—ice. Hammett, D.S., et al, [1978, p.119-128, eng] 41-2122
- Hydrocarbon activities in Greenland. Christensen, M., [1986, p.94-110, eng] 41-2267
- Diatoms beneath the Greenland ice and climatic changes. Harwood, D.M., [1986, p.304-308, eng] 41-2688
- Trace elements in the Greenland Ice Cap melt zone. Chevallier, P., et al, [1987, p.E649-E656, eng] 41-2728
- HF (high frequency) over-the-horizon mapping of the Greenland icecap. Sales, G.S., [1983, p.(11)1-(11)12, eng] 41-3229
- Lichens from central East Greenland. Hansen, E.S., [1982, 36p., eng] 41-3788
- Vegetation of the Angmagssalik District, SE Greenland. Daniels, F.J.A., [1982, 78p. + maps, eng] 41-3789
- Greenland ice-sheet margin—a mine of ice for paleo-environmental studies. Reeh, N., et al, [1987, p.229-234, eng] 41-3794
- Seasonal and spatial trends in south Greenland snow chemistry. Mayewski, P.A., et al, [1987, p.863-869, eng] 41-3890
- Hydrological data collection, interpretation and analysis in Greenland. Thomsen, T., et al, [1986, p.273-282, eng] 41-3902
- Ice and hydropower. Thomsen, H.H., [1986, 73p., dan] 41-3960
- Humic substances from a blue lake on the Greenland ice cap. Gadel, F., et al, [1987, p.107-109, eng] 41-4140
- Ice sheet altimetry in the Antarctic and Greenland. Brooks, R.L., [1981, 30p., eng] 41-4159
- Radioactive cesium from the Chernobyl accident in the Greenland ice sheet. Davidson, C.I., et al, [1987, p.633-634, eng] 41-4225
- Be-10 concentrations in Greenland ice. Monaghan, M.C., [1987, p.197-203, eng] 41-4279
- Last interglacial/glacial cycle in Greenland. Funder, S., [1984, p.261-278, eng] 41-4324
- Glaciological investigations using the synthetic aperture radar imaging system. Bindschadler, R.A., et al, [1987, p.11-19, eng] 41-4428
- Use of remote-sensing data in modelling run-off from the Greenland ice sheet. Thomsen, H.H., et al, [1987, p.215-217, eng] 41-4461
- Dye 3
- Changes in precipitation chemistry at Dye-3, Greenland. Finkel, R.C., et al, [1986, p.9849-9855, eng] 41-1021
- Folding in the Greenland ice sheet. Whillans, I.M., et al, [1987, p.485-493, eng] 41-1976
- Hullet Lake
- Glacier-dammed lake investigations in the Hullet Lake area, South Greenland. Dawson, A.G., [1983, 24p., eng] 41-3302
- Miki Fjord
- Geologic field studies of the Miki Fjord area, East Greenland. Bird, D.K., et al, [1985, p.219-235, eng] 41-872
- Thule
- Concrete foundations on permafrost. Mangus, A.R., [1987, p.40-42, eng] 41-3783
- Vibekes Glacier
- Terrace scarp wind erosion in Arctic East Greenland. Swett, K., et al, [1987, p.45-52, eng] 41-4224
- Greenland Sea
- Climatic cycles as reflected in ice conditions of northern seas. Girdiuk, G.V., et al, [1986, p.122-127, rus] 41-119
- On the sea ice budget of the Greenland Sea. Moritz, R.E., [1986, p.21-58, eng] 41-144
- Coupled ice-mixed layer model for the Greenland Sea. Houssais, M.N., [1986, p.225-260, eng] 41-150
- High-precision distance measurement with an unmanned moving target. Ito, H., et al, [1986, p.93-95, eng] 41-746
- Microwave observations of sea ice in the Bering and Greenland Seas. Grenfell, T.C., [1986, p.378-382, eng] 41-834
- Arctic radio wave propagation. Taagholt, J., [1985, p.(7.1)-(7.1)12, eng] 41-958
- Oceanographic cruise to the Greenland Sea, Sep. 1985. Bourke, R.H., et al, [1986, 32p., eng] 41-1547
- Norwegian Polar Lows Project. Lystad, M., [1986, p.1-16, eng] 41-1796
- Circulation and mixing in ice-covered waters. Carmack, E.C., [1986, p.641-712, eng] 41-2996
- 1984-1985 current observations in the East Greenland Current: a preliminary description. Muench, R.D., et al, [1986, p.41-53, eng] 41-3058
- Winter marginal ice zone experiment, Fram Strait/Greenland Sea, 1987/89. Davidson, K., ed, [1986, 53p., eng] 41-3930
- Summer marginal ice zone experiments in the Fram Strait and Greenland Sea. Johannessen, O.M., [1987, p.6716-6718, eng] 41-4231
- Circulation and water masses of the East Greenland shelf. Bourke, R.H., et al, [1987, p.6729-6740, eng] 41-4233
- Eddy near the Molloy Deep revisited. Bourke, R.H., et al, [1987, p.6773-6776, eng] 41-4236
- Sea ice morphology in the Fram Strait and Greenland Sea from remote sensing data. Campbell, W.J., et al, [1987, p.6805-6824, eng] 41-4239
- Acoustic propagation through an ice edge eddy, eastern Greenland Sea. Mellberg, L.E., et al, [1987, p.6857-6868, eng] 41-4243
- Structure, internal waves and intrusions in the Greenland Sea ice edge zone. Foster, T.D., et al, [1987, p.6903-6910, eng] 41-4246
- Wind stress over rough ice in the ice edge zone, 1984. Anderson, R.J., [1987, p.6933-6941, eng] 41-4249
- Effect of ice conditions on the drag coefficient in the Greenland Sea ice edge zone. Guest, P.S., et al, [1987, p.6943-6954, eng] 41-4250
- Aerosol size distribution in the ice edge zone, 1983. Borrmann, S.H., et al, [1987, p.6971-6976, eng] 41-4253
- Turbulent transfer in a stratified oceanic boundary layer. McPhee, M.G., [1987, p.6977-6986, eng] 41-4254
- Boundary layer, upper ocean, and ice observations in the Greenland Sea marginal ice zone. Morison, J.H., et al, [1987, p.6987-7011, eng] 41-4255
- Dynamics and thermodynamics of the ice-ocean system in the ice edge zone, Greenland Sea. McPhee, M.G., et al, [1987, p.7017-7031, eng] 41-4257
- Photogrammetric observations of the lateral melt of sea ice floes. Hall, R.T., et al, [1987, p.7045-7048, eng] 41-4259
- Ice floe collisions in the Greenland Sea, 1984. Martin, S., et al, [1987, p.7071-7084, eng] 41-4262
- Ground effect machines
- See: Air cushion vehicles
- Ground freezing
- See: Soil freezing
- Ground ice
- Segregation or buried ice in the "Ledianaya Gora" deposit. Vitiurin, B.I., et al, [1986, p.35-43, rus] 41-103
- Geologic conditions of the burial of Pleistocene glacier ice in the Yenisey River area. Astakhov, V.I., [1986, p.72-78, rus] 41-108
- Buried glacier ice and related lithomorphogenetic problems. Karuikapp, R.I.A., [1986, p.78-83, rus] 41-109
- Positive mesorelief forms as a result of underground ice formation. Belopukhova, E.B., et al, [1986, p.84-88, rus] 41-110
- Possibilities of oxygen-isotope technique in studying ground ice. Arkhangelov, A.A., et al, [1986, p.88-92, rus] 41-111
- Loess deposits of the USSR. Sergeev, E.M., ed, [1986, 2 volumes (only Vol.2 pertinent), rus] 41-620
- Determination of pore ice stresses in frozen soils. Youssef, H., [1986, p.262-282, eng] 41-1101
- Freezing effect on seismic velocity in permafrost. Zimmerman, R.W., et al, [1986, p.1285-1290, eng] 41-1213
- Pingo ice of the western Arctic coast, Canada. Mackay, J.R., [1985, p.1452-1464, eng] 41-1238
- Measurement of ablation of exposed ground ice. Lewkowicz, A.G., [1985, p.1767-1773, eng] 41-1241
- Pingos of the Prudhoe Bay region, Alaska. Walker, D.A., et al, [1985, p.321-336, eng] 41-1251
- Aspects of ice lens growth in soils. Penner, E., [1986, p.91-100, eng] 41-1308
- Lithogenesis of ground ice. Solomatina, V.I., [1986, 216p., rus] 41-1342
- Ground ice study in its present stage (based on Soviet publications). Vitiurin, B.I., [1986, p.193-197, rus] 41-1667
- Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al, [1986, p.199-228, rus] 41-1668
- Mars: long term changes in the state and distribution of H<sub>2</sub>O. Fanale, F.P., et al, [1985, p.535-564, eng] 41-1723
- Subsurface ice and permafrost on Mars. Anderson, D.M., [1985, p.565-581, eng] 41-1724
- Geomorphologic evidence for ground ice on Mars. Lucchitta, B.K., [1985, p.583-604, eng] 41-1725
- Underground ice in permafrost. Gell, W.A., [1976, 260p., eng] 41-1764
- Study of tabular ground ice bodies from the Ledianaya Gora section in the Yenisey valley using the oxygen isotope method. Vafkima, R.A., et al, [1986, p.32-38, eng] 41-1789
- Heat release during agitated water movement near the ice surface. Gogolev, E.S., et al, [1985, p.14-16, rus] 41-1816
- Heat transfer from waves impacting on ice surface. Gogolev, E.S., et al, [1986, p.58-62, eng] 41-1854
- Quaternary glaciations of Central Siberia. Velichko, A.A., ed, [1986, 121p., rus] 41-1906
- Peculiarities of studying the Pleistocene Edoma series of the northeastern USSR. Tomirdiaro, S.V., et al, [1984, p.159-173, rus] 41-1912
- Engineering creep models for frozen soil behaviour. Berggren, A.-L., [1983, 357p., eng] 41-2014
- Experimental studies of injected ice formation in fine-grained rocks. Ershov, E.D., et al, [1986, p.136-149, rus] 41-2094
- Solubility of ice in frozen ground induced by salt solutions. Galdaenko, E.I., [1986, p.32-36, rus] 41-2150
- Self-similar solution of a problem of freezing of finely dispersed soils with allowance for moisture migration in thawed and frozen zones. Ianitskii, P.A., [1986, p.264-270, eng] 41-2208
- Ground water flow in frozen ground. Makowski, E., [1986, 292p., ger] 41-2229
- Chronostratigraphy of syngenetic permafrost deposits by oxygen-isotope analysis. Arkhangelov, A.A., et al, [1986, p.415-417, rus] 41-2307
- In situ creep properties in ice-rich permafrost soil. Savigny, K.W., et al, [1986, p.504-514, eng] 41-2470
- Permafrost and Quaternary history of the Mackenzie-Beaufort region. Judge, A.S., [1986, p.3-10, eng] 41-2508
- Engineering properties of permafrost. Ladanyi, B., [1986, p.24-33, eng] 41-2511
- Ground ice. Shvetsov, P.F., et al, [1986, p.36-45, rus] 41-2534
- RIGIDICE model of frost heave and its input functions. Black, P.B., [1986, 111p., eng] 41-2581
- Palsa formation in North-Central Alaska. Hinkel, K.M., [1986, 217p., eng] 41-2640
- Evidence for Holocene thaw unconformity at Mayo, Yukon Territory. Burn, C.R., et al, [1986, p.794-803, eng] 41-2684
- Morphology, genesis and temporal context of the Aishihik pingo (SW Yukon). Geurts, M.A., et al, [1985, p.291-298, fre] 41-2761
- Dislocations in frozen, ice-containing, Pleistocene deposits of northern western Siberia. Danilov, I.D., [1986, p.28-41, rus] 41-2816
- Cryogenic-inversion ridges of northwestern Siberia. Bolikhovskii, V.F., et al, [1986, p.128-132, rus] 41-2829
- Characteristics of granulometric composition of Late Pleistocene deposits in the Ledovyy Obryv outcrop. Kotov, A.N., et al, [1986, p.200-206, rus] 41-2841
- Pale yellow soils of the central Siberian Plateau. Sokolov, I.A., [1986, p.25-38, rus] 41-3083
- Geomechanical studies of power supply structure foundations. Saepgin, D.D., ed, [1985, 120p., rus] 41-3126
- Consolidation equations of Biot-Florin for three-phase soils. Gorelik, L.V., et al, [1985, p.56-62, rus] 41-3128
- Ground ice in western Siberia. Grosval'd, M.G., et al, [1986, p.173-183, eng] 41-3197
- Prospects and problems of hydraulic power construction in the North. Bilanov, G.F., et al, [1986, p.5-12, rus] 41-3440
- Engineering and geological conditions of construction and operation of hydraulic structures built on perennially frozen hard rocks. Kagan, A.A., et al, [1986, p.34-44, rus] 41-3444
- Geologic indication of ground ice in Tien Shan and Pamir. Ermolin, E.D., [1986, p.22-29, rus] 41-3483
- On the origin of aggradational ice in permafrost. Burn, C.R., [1986, 222p. + append., eng] 41-3507
- Prospects for using oxygen isotope determinations in paleogeocryological reconstructions. Vasil'chuk, I.U.K., et al, [1985, p.64-65, rus] 41-3533
- Ground ice origin from deuterium and heavy oxygen isotope content. Vasil'chuk, I.U.K., et al, [1985, p.66-68, rus] 41-3536
- Isotope composition of ground ice on the Yamal Peninsula. Kritsuk, L.N., et al, [1985, p.142-143, rus] 41-3537
- Paleogeocryological studies of relic ground ice in permafrost. Kaplanskaya, F.A., et al, [1986, p.257-266, eng] 41-3616
- Description of tabular ground ice outcropping in the Ledianaya Gora. Vitiurin, B.I., et al, [1986, p.273-285, eng] 41-3618
- Buried Pleistocene glacier ice on the Yenisey River. Astakhov, V.I., [1986, p.286-295, eng] 41-3619
- Positive mesorelief forms as the result of ground ice formation. Belopukhova, E.B., et al, [1986, p.296-302, eng] 41-3620
- Relief and deposits of the Severnaya Zemlya islands. Makeev, V.M., et al, [1986, p.331-338, eng] 41-3625
- Preparation of geophysical borehole site with ground ice. Fairbanks, A.K. Delaney, A.J., [1987, 15p., eng] 41-3627
- Thermal break-up of frozen cohesive rocks. Mochalov, V.I., et al, [1986, p.68-69, rus] 41-3765
- Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] 41-3771
- Massive ground ice and geology in continuous permafrost. Dallimore, S.R., et al, [1987, p.913-918, eng] 41-4016
- Effect of dynamic action on compressibility of thawing sands. Inozemtsev, V.K., [1987, p.235-240, eng] 41-4165
- Establishing compressibility values of thawing permafrost. Maksimenko, E.S., et al, [1987, p.248-251, eng] 41-4166
- Ablation of exposed ground ice. Lewkowicz, A.G., [1986, p.511-519, eng] 41-4306
- Frost susceptibility of soil in relation to ice lens formation. Takeda, K., [1987, p.75-86, jpn] 41-4322
- Naturally occurring creep in ice-rich permafrost. Savigny, K.W., [1980 355p., eng] 41-4596
- See also: Ice lenses; Ice veins; Ice wedges



**Ground temperature**

See: Soil temperature

**Ground thawing**

Economic impact of roadblocks during thaw periods of the 1984-85 winter. Bouzigue, J.B., et al, [1986, p.51-59, frej] 41-172

Unique frost thawers. Hale, D., [1986, p.31-32, eng] 41-175

Increasing the accuracy of determining deformative characteristics of thawing ground. Marenin, I.A., [1985, p.97-99, rus] 41-323

Effects of freeze thaw cycles on granular soils for pavements. Cole, D., et al, [1986, 70p., eng] 41-593

State of permafrost mined by the express method. Umantsev, R.F., [1985, p.52-54, rus] 41-1018

Seasonal variations of nitrogen in soils, Alberta. Malhi, S.S., et al, [1986, p.397-409, eng] 41-1085

Effect of freeze/thaw on gaseous nitrogen loss from upland soils. Edwards, A.C., et al, [1986, p.86-91, eng] 41-1441

Exact solution for melting of frozen soil with thaw consolidation. Lunardini, V.J., [1987, p.97-102, eng] 41-2408

Two-dimensional freezing fronts in aligid soil. Yen, C.C., et al, [1987, p.109-112, eng] 41-2410

Design of Norman Wells pipeline for frost heave and thaw settlement. Nixon, J.F., et al, [1986, p.67-85, eng] 41-2516

Monitoring of thawing permafrost slopes. McRoberts, E.C., et al, [1986, p.133-151, eng] 41-2520

Building thawed-earth dams in northern climatic zone. Shatyn, V.A., [1986, p.80-83, rus] 41-2754

Mechanisms of mass movement in periglacial environments. Harris, C., [1987, p.531-559, eng] 41-3045

Consolidation equations of Biot-Florin for three-phase soils. Gorelik, L.V., et al, [1985, p.56-62, rus] 41-3128

Seismo-acoustic studies of frozen and thawed calcareous clays. Voronkov, O.K., et al, [1985, p.88-95, rus] 41-3129

Changes in the active layer with changes in forest cover in Yakutia. Stashenko, A.I., [1986, p.194-199, eng] 41-3199

Numerical evaluation of the effect of hydrometeorological factors on the formation of water reserves in soil. Zaretskii, I.U.A., et al, [1986, p.46-56, rus] 41-3587

Using a model of capillary porous body for calculating water seepage into soil. Golitsina, E.F., et al, [1986, p.108-116, rus] 41-3589

Collapsed glacial topography at Adams Inlet, Alaska. McKenzie, G.D., et al, [1987, p.55-59, eng] 41-3596

Formation of loads on underground structures in thawing disperse ground. Sokolov, M., [1986, p.24-25, rus] 41-3735

Surface modifications for thawing of permafrost. Interim report. Esch, D.C., [1984, 15p., eng] 41-4074

Isothermal phase change model for freezing and thawing soils 1: development. Hromadka, T.V., II, [1986, p.113-117, eng] 41-4134

Isothermal phase change model for freezing and thawing soils 2: model. Hromadka, T.V., II, et al, [1986, p.118-123, eng] 41-4135

Poolproof sinking of pipes into thawed and perennially frozen grounds. Novozhilov, G.F., [1987, 111p., rus] 41-4167

New sampling technique for northern placer mines. Riabets, N.I., et al, [1986, p.10-15, rus] 41-4549

**Ground water**

Grazing research at northern latitudes. [1986, 374p., eng] 41-216

Frost bulb with or without groundwater flow on a buried chilled Alaskan pipe. Perera, W.G., [1984, p.1850-1855, eng] 41-457

Ground-water fluctuations in hillslopes of coastal Alaska. Sidle, R.C., [1984, p.79-95, eng] 41-627

Some observations on subglacial ground-water flow. Smart, C.C., [1986, p.224-231, eng] 41-683

Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed, [1984, 110p., rus] 41-721

Hydrologic regime of rivers in inner and central Tien Shan. Muzakeev, M.A., [1984, p.3-9, rus] 41-722

Equations for calculating water balance of mountain rivers. Muzakeev, M.A., et al, [1984, p.9-25, rus] 41-723

Ground water runoff into Kirghiz rivers. Ergeshev, A., [1984, p.26-35, rus] 41-724

Water supply and waste water dilution in permafrost regions. Kokovkin, A.V., [1986, p.57-67, rus] 41-1169

Polyvinyl chloride well casings for ground water monitoring. Parker, L.V., et al, [1986, p.92-98, eng] 41-1345

Ground-water contamination at Peters Creek, Municipality of Anchorage, Alaska: ground-water occurrence and movement. Munter, J.A., [1986, 12p., eng] 41-1351

All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd. Novosibirsk, 1984. Proceedings, [1985, 126p., rus] 41-1362

Influence of moisture condition on frost heave in clay. Xu, B., et al, [1986, p.217-222, chij] 41-1418

Salt transfer processes in cryogenic soils. Panin, P.S., et al, [1986, p.245-250, rus] 41-1745

Ground water flow in frozen ground. Makowski, E., [1986, 292p., ger] 41-2229

Bibliography on ground water in glacial-aquifer systems, U.S.A. Wiltshire, D.A., et al, [1986, 26p., eng] 41-2464

Characteristics of a glacial valley in the North Italian Dolomites. Van de Griend, A.A., et al, [1986, p.275-299, eng] 41-2698

Groundwater models for mountain slopes. Okunishi, K., et al, [1987, p.265-285, eng] 41-3043

D/H ratios of snow and ground water in eastern New York State. Lawrence, J.R., [1987, p.519-521, eng] 41-3310

Heat transfer with phase change in ground-water flow. Kawatani, T., et al, [1985, p.206-217, eng] 41-3340

Satellite methods of studying naleds and ground waters of eastern Pamir. Topchiev, A.G., [1986, p.48-58, rus] 41-3391

Cryolithozone and ground water. Nekrasov, I.A., [1987, p.116-118, rus] 41-3398

Micropollutant behavior in karst water systems during snowmelt. Simmler, N., et al, [1987, p.79-95, eng] 41-3965

Micropollutant behavior in karst water: karst filtration capacity. Simmler, N., et al, [1987, p.97-109, eng] 41-3966

Determining the thermal conductivity coefficient for thawed and frozen grounds. Danielian, I.U.S., et al, [1983, p.20-24, rus] 41-4483

Spring runoff processes in Åstaden, Norway. Englund, J.-O., [1986, p.1-20, eng] 41-4512

Effect of salting on surface and ground water. Bischofsberger, W., [1987, p.192-197, ger] 41-4519

See also: Soil water; Subpermafrost ground water; Suprapermafrost ground water; Water table

**Grounded ice**

On the deterioration of a grounded iceberg. Venkatesh, S., [1986, p.442-471, eng] 41-159

Numerical study of plane ice-sheet flow. Hutter, K., et al, [1986, p.139-160, eng] 41-674

On the deterioration of a grounded iceberg. Venkatesh, S., [1986, p.161-167, eng] 41-675

Ice rumples on Ronne Ice Shelf. Smith, A.M., [1986, p.47-52, eng] 41-800

Use of ice-isles for protection of petroleum production platforms. Fangel, H., [1986, p.583-604, eng] 41-1119

Canadian Beaufort Sea 1984 repetitive mapping of ice scour. Shearer, J., et al, [1986, 43p. + append. + maps, eng] 41-1566

Viscoelasticity of flooded and spray ice using flatjacks. Spencer, P.A., et al, [1987, p.17-23, eng] 41-2397

Ice scoring in the Canadian Beaufort Sea. McGonigal, D., et al, [1986, p.51-59, eng] 41-3091

Dynamics of Iceberg Grounding and Scouring (DIGS) experiment. Lewis, C.F.M., [1986, p.129-131, eng] 41-3101

Iceberg dynamics of the DIGS experiment. Lever, J., [1986, p.138-142, eng] 41-3103

Geotechnical aspects of the DIGS experiment. Moran, K., [1986, p.143-147, eng] 41-3104

Documentation of iceberg groundings. El-Tahan, M., et al, [1986, p.194-199, eng] 41-3110

Numerical model for iceberg grounding events. D'Apollonia, S.J., et al, [1986, p.221-232, eng] 41-3114

Iceberg-grounding study, Labrador well-site observations. Woodworth-Lynas, C.M.T., et al, [1986, p.269-283, eng] 41-3119

Contribution to the study of sediments in the Bransfield Strait region. Silva Martins, L.R., et al, [1987, p.127-146, por] 41-3156

Grounded ice island—field and laboratory research interim report. Duthweiler, F.C., et al, [1986, 29p. + 3 append., eng] 41-3422

Grounded ice island—field and laboratory research. Final report. Duthweiler, F.C., et al, [1976, 26p. + append., eng] 41-3569

Coupled marine ice-stream-ice-shelf model. Muszynski, L., et al, [1987, p.3-15, eng] 41-3590

**Grounding**

See: Electrical grounding

**GROUTING**

Ultrasonic tests of grouting quality in concrete dams. Ermoshin, V.M., et al, [1986, p.33-36, rus] 41-1922

Iron ore wastes used in construction materials in the North. Prokofeva, V.V., et al, [1986, 176p., rus] 41-2214

Construction of structures and foundations by the grout curtain method. Smorodinov, M.I., et al, [1986, 216p., rus] 41-2886

Guide to soil stabilization by injection. [1986, 129p., rus] 41-3608

Grouting in difficult soil and weather conditions. Sealy, C.O., et al, [1987, p.84-94, eng] 41-3888

**GROWTH**

Lichen growth in the central Brooks Range, Alaska. Haworth, L.A., et al, [1986, p.289-296, eng] 41-1177

Plant ecology at the alpine timberline, New Zealand. Norton, D.A., et al, [1984, p.361-370, eng] 41-1236

Growth of rock lichens in low-Arctic mountain environment, Labrador. Rogerson, R.J., et al, [1986, p.85-91, eng] 41-2707

Structural-functional interrelationships and productivity of phytocenoses. Buzukin, A.I., ed, [1983, 140p., rus] 41-2746

Radial growth of conifers in different Angara River forest areas. Dashkovskaya, I.S., [1983, p.82-94, rus] 41-2748

Gullies

Flora of overgrown gullies. Shishkina, L.P., [1986, p.67-70, rus] 41-1165

Regional investigations of thermal erosion. Voskresenskii, K.S., et al, [1986, p.61-63, rus] 41-4064

Thermal erosion in the Baykal Amur railroad zone. An, V.V., et al, [1984, p.35-39, rus] 41-4356

Hail

Numerical simulation of an Alberta hailstorm. Yau, H.K., et al, [1984, p.585-588, eng] 41-4407

Microphysical interpretation of radar polarization measurements. Jameson, A.R., [1984, p.791-792, eng] 41-4419

Cloud water freezing accompanied by electrocrystallization potentials. Kolev, S., et al, [1984, p.793-796, eng] 41-4420

**Hailstone growth**

Effects of liquid water content in clouds on ice crystal production. Foster, T., et al, [1982, p.123-126, eng] 41-12

Hailstone concentration and size at the ground and at the melting level. Cheng, L., et al, [1982, p.423-426, eng] 41-48

Hail formation in an Oklahoma multicell storm. Ziegler, C.L., et al, [1982, p.427-430, eng] 41-49

Influence of storm flow structure on hail growth. Nelson, S.P., [1982, p.431-433, eng] 41-50

Development of graupel particles and hailstones in storms. Heymsfield, A.J., [1982, p.434-437, eng] 41-51

Hailstone growth and various microphysical parameters. Foster, M.P., et al, [1982, p.438-441, eng] 41-52

Hailstone density and terminal velocity. Knight, N.C., et al, [1982, p.442-445, eng] 41-53

Graupel and hail production mechanisms. Heymsfield, A.J., [1982, p.453-456, eng] 41-56

Properties of ice accreted in two-stage growth. Prodi, F., et al, [1986, p.1057-1080, eng] 41-1475

Hailstone shape factor and its relation to radar interpretation of hail. Knight, N.C., [1986, p.1956-1958, eng] 41-4058

Numerical modeling of hailstorms and hailstone growth. Farley, R.D., et al, [1986, p.2014-2035, eng] 41-4059

International Cloud Physics Conference, 9th, Tallin, 1984. [1984, 3 vols. (835p.), eng] 41-4369

Collection efficiencies of soft-hail pellets for ice crystals. Saunders, C.P.R., et al, [1984, p.177-178, eng] 41-4386

Numerical modelling of hail to rain conversion. Joe, P., et al, [1984, p.261-265, eng] 41-4396

Wet growth and structure of hailstones. Knight, N.C., et al, [1984, p.267-269, eng] 41-4397

Annealing effects on the hailstone structure. Levi, L., et al, [1984, p.271-274, eng] 41-4398

Hail to rain conversion through melting. List, R., et al, [1984, p.275-278, eng] 41-4399

Microphysical conditions of hail formation in clouds. Tisov, M.I., et al, [1984, p.287-290, eng] 41-4402

Role of low density riming growth in hail production. Farley, R.D., [1984, p.489-492, eng] 41-4404

Numerical model of hailstone growth. Geresdi, I., et al, [1984, p.493-496, eng] 41-4405

Numerical simulation of hail embryo growth. Levi, L., et al, [1984, p.505-508, eng] 41-4406

**Hailstone structure**

New clues for decoding hailstone structure. Pflaum, J.C., et al, [1982, p.446-449, eng] 41-54

Analysis and research of hailstone micro-structure. Wang, A.S., et al, [1982, p.450-452, eng] 41-55

Microphysical structures of hailstones observed on the Xizang plateau. Guo, E., [1984, p.91-94, eng] 41-4377

Frozen drop embryos in Alberta hailstorms and their origins. English, M., et al, [1984, p.253-255, eng] 41-4394

Wet growth and structure of hailstones. Knight, N.C., et al, [1984, p.267-269, eng] 41-4397

Annealing effects on the hailstone structure. Levi, L., et al, [1984, p.271-274, eng] 41-4398

Microphysical conditions of hail formation in clouds. Tisov, M.I., et al, [1984, p.287-290, eng] 41-4402

**Hailstones**

Wind, earthquake, snow, and hail loads on solar collectors. Cattaneo, L., et al, [1981, 88p., eng] 41-173

Technique for measuring the rotational properties of falling oblate ice spheroids. Battan, L.J., [1985, p.665-666, eng] 41-3217

Microstructural characteristics of hailstone embryos. Tisov, M.I., et al, [1986, p.229-237, rus] 41-3672

Shape and size distributions of hailstones. Wang, P.K., et al, [1987, p.1062-1070, eng] 41-3851

**Hailstones (cont.)**

- Microphysical origin of graupel and hail. Fukuta, N., et al. [1984, p.257-260, eng] **41-4395**

**Hammers**

- Hydropneumatic hammers of EO-2621 excavators for frozen ground. Karnaukhov, A.V., et al. [1978, p.74-78, rus] **41-1325**
- Pile driving assembly for frozen ground. Falvusovich, L.L., et al. [1986, p.10-11, rus] **41-1525**

**Handbooks**

See: Manuals

**Harbors**

See: Ports

**Hardening**

See: Concrete hardening

**Hardness**

See: Snow hardness

**Hardness tests**

- Drilling instruments made of extra-hard materials. Collection of scientific papers. Vovchanovskii, I.F., ed. [1986, 87p., rus] **41-4498**

**Haze**

- Air chemistry observations in the Canadian Arctic. Hoff, R.M., et al. [1986, p.97-107, eng] **41-348**
- Radiative effects of aerosol components in Arctic haze and snow. Blanchet, J.P., et al. [1987, p.293-317, eng] **41-4206**

**Heat**

- Nomographs for meltwater determination. Ambach, W., et al. [1986, p.181-189, eng] **41-4357**
- Nomographs for the determination of meltwater from snow and ice surfaces. Ambach, W., [1986, p.7-15, eng] **41-4358**

See: Latent heat

**Heat balance**

- Frost bulb with or without groundwater flow on a buried chilled Alaskan pipe. Perera, W.G., [1984, p.1850-1855, eng] **41-457**
- Role of debris cover in the thermal physics of glaciers. Bozhinski, A.N., et al. [1986, p.255-266, eng] **41-687**
- Freeze protection of ships and shipborne equipment. Roberts, J., et al. [1986, p.500-542, eng] **41-954**
- Snowmelt lysimeter for research applications. Greenan, H.J., et al. [1984, p.209-218, eng] **41-1962**
- Eolian dunes in Victoria Land. Miotke, F.-D., [1985, p.79-125, ger] **41-3252**
- Heat budget of the Ross drainage basin. Oerlemans, J., [1987, p.287-292, eng] **41-3285**
- Calculating heat balance constituents of soil surface. Konstantinov, A.R., et al. [1986, p.62-66, eng] **41-3679**
- Studies of basin heat balance and snowmelt runoff models. Motoyama, H., [1986, p.1-53, eng] **41-3845**
- Albedo and heat balance of oil-polluted ice-snow surfaces. Izmailov, V.V., et al. [1986, p.117-120, rus] **41-3869**
- Small-scale interaction between atmosphere and ocean at Maud Rise. Makshtas, A.P., et al. [1986, p.67-71, rus] **41-4189**
- Role of shortwave radiation in the summer decay of a sea ice cover. Maykut, G.A., et al. [1987, p.7032-7044, eng] **41-4258**
- Dynamics and thermal regime of glaciers. Shumskii, P.A., et al. [1986, p.34-39, 152-157, rus] **41-4337**
- See also: Glacier heat balance; Permafrost heat balance

**Heat capacity**

- Thermodynamics of electrolyte solutions. Beyer, R.P., et al. [1986, p.749-764, eng] **41-1553**
- Heat of solution of methane in water from 0 to 50 C. Naghibi, H., et al. [1986, p.4621-4623, eng] **41-2064**
- Field measurements of soil thermal conductivity. Goodrich, L.E., [1986, p.51-59, eng] **41-2323**
- Heats of solution of ethane and propane in water from 0 to 50 C. Naghibi, H., et al. [1987, p.245-248, eng] **41-3311**

**Heat conductivity**

See: Thermal conductivity

**Heat flux**

- Sea ice distribution over the N.E. Newfoundland Shelf. Symonds, G., [1986, p.88-114, eng] **41-146**
- In-situ assessment of two retrofit insulations. Flanders, S.N., [1986, p.32-44, eng] **41-1377**
- Freezing front location in two-dimensional cold soils. Hromadka, T.V., II, et al. [1987, p.91-95, eng] **41-2407**
- Estimating ocean-air heat fluxes during cold air outbreaks by satellite. Chou, S.-H., et al. [1981, 48p., eng] **41-2527**
- Comments on *A heat balance for the Bering Sea ice edge*. Kantha, L.H., [1986, p.2205-2208, eng] **41-2843**
- Recurring polynyas over the Cosmonaut Sea and the Maud Rise. Comiso, J.C., et al. [1987, p.2819-2833, eng] **41-3080**
- Laboratory investigation of the melting of ice by induced convection. Bogorodskii, V.V., et al. [1986, p.94-96, eng] **41-3682**
- Measuring building R-values with thermography and heat flux sensors. Flanders, S.N., [1987, 29p., eng] **41-4083**
- Water temperature and heat flux at the base of river ice covers. Marsh, P., et al. [1987, p.33-50, eng] **41-4214**

- Ablation of exposed ground ice. Lewkowicz, A.G., [1986, p.511-519, eng] **41-4306**

See also: Ice heat flux; Snow heat flux

**Heat loss**

- Offshore anti-icing, field results and approval considerations. Lonsdale, J.T., et al. [1986, p.471-483, eng] **41-1113**
- Thermal performance of the exterior envelopes of buildings; Proceedings. [1986, 1422p., eng] **41-1376**
- Study of heat loss through basement floors. Richmond, W.R., et al. [1986, p.336-350, eng] **41-1381**
- Heat loss factors for insulated building foundations. Zarling, J.P., et al. [1986, p.465-483, eng] **41-1383**
- Instrument for measuring building-envelope thermal resistance. Janssen, J.E., et al. [1986, p.723-738, eng] **41-1386**
- Reduced energy losses through structural thermal bridges. Tye, R.P., et al. [1986, p.739-750, eng] **41-1387**
- Convective loop heat losses in buildings. Harrie, D.T., et al. [1986, p.751-760, eng] **41-1388**
- Decision model for the design of building envelopes. Murthy, N.S., [1986, p.1379-1392, eng] **41-1393**
- Wind-chill indices—a review. Dixon, J.C., et al. [1987, p.1-17, eng] **41-3576**

**Heat measurement**

See: Temperature measurement

**Heat pipes**

- Construction of heating networks in cold regions. Sypachev, G.G., et al. [1986, p.421-422, eng] **41-4160**
- Starting an arterial heat pipe from frozen state. Abramenko, A.N., et al. [1987, p.1283-1288, eng] **41-4161**

Heat pipes to avoid freezing of highway bridge decks. Ferrara, A.A., et al. [1977, 5p., eng] **41-4604**

**Heat sinks**

- Condensing steam tunnel heat sinks. Lunardini, V.J., [1986, 29p., eng] **41-1350**
- Ice heat sinks. Part 1: Vertical systems. Lunardini, V.J., [1986, 107p., eng] **41-3815**
- Ice heat sinks. Part 2: Horizontal systems. Lunardini, V.J., [1986, 104p., eng] **41-3818**

**Heat sources**

- Analysis of melting around a moving heat source. Moatlemi, M.K., et al. [1986, p.1271-1282, eng] **41-394**

**Heat transfer**

- Flow patterns generated by an ice keel in stratified flow. Topham, D.R., et al. [1986, p.328-349, eng] **41-154**
- Heat distribution research. Phetteplace, G., [1986, p.2-3, eng] **41-407**
- Water-source heat pumps. Phetteplace, G., [1986, p.14-15, eng] **41-408**
- International Heat Transfer Conference, 6th, Toronto. [1978, Vols. 1, 2 and 3, eng] **41-463**
- Heat and mass transfer in soil. Shapiro, H.N., et al. [1978, p.19-24, eng] **41-465**
- Heat transfer in frost and snow. Auracher, H., [1978, p.25-30, eng] **41-466**
- Analysis of the freezing around a chilled pipe in darcy flow. Okada, M., et al. [1978, p.31-36, eng] **41-467**
- Blockage of flow resulting from freezing of liquid. Creighton, D.L., et al. [1978, p.37-42, eng] **41-468**
- Numerical simulation of melting of ice around a horizontal cylinder. Ho, C.J., et al. [1986, p.1359-1369, eng] **41-564**
- Pingos—a not so open and closed case. Waddington, C.K., [1985, p.30-52, eng] **41-578**
- Heat transfer in a freezing shaft wall. Liandi, F., [1986, 24p., eng] **41-595**
- Natural convection in sloping porous layers. Powers, D.J., et al. [1986, p.697-710, eng] **41-608**
- Transient two-dimensional phase change. Albert, M.R., et al. [1985, p.229-243, eng] **41-657**
- Enthalpy methods used in the solution of Stefan problems. Voller, V.R., et al. [1985, p.245-275, eng] **41-658**
- Two-dimensional heat conduction phase change. Albert, M.R., et al. [1983, p.85-110, eng] **41-659**
- Mapping buried glacier ice, Monte Rosa, Italian Alps. Haeblerli, W., et al. [1986, p.78-81, eng] **41-743**
- Mathematical model of frost heave in freezing soils. Hromadka, T.V., II, [1980, 178p., eng] **41-899**
- Ice pumps and their rates. Lewis, E.L., et al. [1986, p.11,756-11,762, eng] **41-1024**
- Mesoscale circulations initiated by melting snow. Lin, C.A., et al. [1986, p.13,299-13,302, eng] **41-1026**
- USARP automatic weather station project. Stearns, C.R., [1986, p.5-12, eng] **41-1072**
- Field measurements of ice growth suppression by surface insulation. Christensen, F.T., [1986, p.436-446, eng] **41-1111**
- Roughness and transfer coefficients over snow and sea ice. Andreas, E.L., [1986, 19p., eng] **41-1263**
- Thermal behavior of a cryogenic storage pilot station. Cames-Pintaux, A.M., et al. [1986, p.105-114, eng] **41-1281**
- Ice crystallization in continuous crystallizers. Shirai, Y., et al. [1986, p.2241-2246, eng] **41-1348**
- Condensing steam tunnel heat sinks. Lunardini, V.J., [1986, 29p., eng] **41-1350**

- Thermal performance of the exterior envelopes of buildings; Proceedings. [1986, 1422p., eng] **41-1376**

Dynamic thermal performance of insulated metal deck roof systems. Courville, G.E., et al. [1986, p.53-63, eng] **41-1379**

Dynamic thermal performance of walls. Fazio, P., et al. [1986, p.255-271, eng] **41-1380**

Study of heat loss through basement floors. Richmond, W.R., et al. [1986, p.336-350, eng] **41-1381**

Thermal performance of rigid cellular foam insulation at subfreezing temperatures. Aldrich, D.F., et al. [1986, p.500-509, eng] **41-1384**

Reduced energy losses through structural thermal bridges. Tye, R.P., et al. [1986, p.739-750, eng] **41-1387**

Thermal resistance measurements of a well-insulated wall. Zarr, R.R., et al. [1986, p.957-973, eng] **41-1389**

Snowmelt simulation of short living snowpacks. Bauwens, W., [1985, p.139-155, eng] **41-1491**

Snowpack depletion in a forested catchment. Buttle, J.M., et al. [1985, p.267-271, eng] **41-1503**

Model of heat and soil-water flow coupled by soil-water phase change. Hromadka, T.V., II, [1987, 124p., eng] **41-1568**

Thermal analysis of heat flow in ice sinks. Gregoire, G.B., et al. [1986, p.263-285, eng] **41-1598**

Progress in pedology. Contributions of Soviet pedologists to the 13th International Congress of Pedologists, Hamburg, 1986. Kovda, V.A., ed. [1986, 270p., rus] **41-1743**

CO2 snow-making process. Crowe, O.F., et al. [1983, 10 col., eng] **41-1769**

Spatial variability of lake ice covers. Bengtsson, L., [1986, p.113-121, eng] **41-1848**

Control and method for defrosting a heat pump outdoor heat exchanger. Saunders, J.F., et al. [1982, 14 col., eng] **41-1993**

Energy-flow budgets in aquatic ecosystems. Petersen, G.H., [1984, p.621-633, eng] **41-2010**

Latent heat thermal energy storage. Saito, A., et al. [1986, p.2946-2952, eng] **41-2109**

Heat transfer characteristics of a latent heat storage unit. Sasaguchi, K., et al. [1986, p.2978-2992, eng] **41-2110**

Bulk transfer coefficients for heat and momentum over leads and polynyas. Andreas, E.L., et al. [1986, p.1875-1883, eng] **41-2220**

Performance of a closed tube thermosyphon. Lock, G.S.H., et al. [1987, p.69-77, eng] **41-2404**

Heat transfer of a thermosyphon. Zarling, J.P., et al. [1987, p.79-84, eng] **41-2405**

Two-dimensional freezing fronts in aligid soil. Yen, C.C., et al. [1987, p.109-112, eng] **41-2410**

Thermal characteristics of concrete structures during curing processes. Wu, C.Z., et al. [1987, p.113-118, eng] **41-2411**

Heat and moisture transfer in a partly frozen nonheaving soil. Kung, S.K.J., et al. [1986, p.1114-1122, eng] **41-2474**

Natural and forced convection in mineral fibre wall insulation. Kohonen, R., et al. [1986, 119p., fin] **41-2522**

Investigation of melting ice in an isothermal horizontal cylinder. Riviere, P., et al. [1987, p.155-165, eng] **41-2881**

Formation and melting of a vertical ice slab in an enclosure. Sorour, M.M., et al. [1987, p.167-177, eng] **41-2882**

Hydraulics of river ice. Shen, H.T., [1985, 78p., eng] **41-2935**

Freezing around a buried pipe. Sadegh, A.M., et al. [1987, p.223-232, eng] **41-2981**

Bounds for the freezing time and removed energy during solidification. Charach, C., et al. [1987, p.233-240, eng] **41-2982**

Surface heat and mass balance. Maykut, G.A., [1986, p.395-463, eng] **41-2991**

Physico-chemical processes of mining. Mathematical models of leaching ores and thawing frozen rocks. Ignatov, A.A., [1986, 97p., rus] **41-3015**

Results of modeling high latitude climates. Nagurnyi, A.P., [1986, p.21-32, eng] **41-3263**

Heat transfer, 1986; proceedings. [1986, 6 vols. + 1 vol. of abstracts, eng] **41-3288**

Phase-change heat transfer in porous media. Torrance, K.E., [1986, p.181-188, eng] **41-3289**

Transient heat transfer in porous thermal insulations. Tong, T.W., et al. [1986, p.703-708, eng] **41-3290**

Prediction of freeze-thaw time, freezing and melting. Dilley, J.F., et al. [1986, p.1727-1732, eng] **41-3291**

Buoyancy and surface tension driven natural convection with solidification. Munakata, T., et al. [1986, p.1733-1738, eng] **41-3292**

Laminar flow heat transfer in a tube with internal solidification. Toda, S., et al. [1986, p.1745-1750, eng] **41-3293**

Non-isothermal and transient flow of molten polymer in an open rectangular cavity. Flaman, A.A.M., et al. [1986, p.1751-1754, eng] **41-3294**

Outward phase change in a cylindrical annulus with circumferential fins. Padmanabhan, P.V., et al. [1986, p.1773-1779, eng] **41-3295**

- Effects of density change and subcooling on the melting of a solid in a rectangular enclosure. Kassinos, A., et al, 1986, p.1787-1792, eng 41-3296
- Prediction and measurement of melting heat transfer to an unfixed phase change material heated in a horizontal concentric annulus. Betzel, T., et al, 1986, p.1793-1798, eng 41-3297
- Onset of natural convection and heat transfer in a layer of water below melting ice. Engilberger, W., et al, 1986, p.1799-1804, eng 41-3298
- Direct contact melting heat transfer on a heated surface. Saito, A., et al, 1986, p.1805-1810, eng 41-3299
- Liquid-solid phase change heat transfer. Maslulaniec, K.C., et al, 1985, p.194-205, eng 41-3339
- Heat transfer with phase change in ground-water flow. Kawatani, T., et al, 1985, p.206-217, eng 41-3340
- Ice formation in a curved channel and heat transfer at water-ice interface. Ishimiya, K., et al, 1987, p.294-301, eng 41-3401
- Porous medium physical model of frost layers. Meng, F., et al, 1987, p.584-593, eng 41-3402
- Experimental investigations of heat-mass transfer coefficients in macroporous media. Mukhetdinov, N.A., 1986, p.119-127, rus 41-3455
- Investigation of moisture movements and stresses in frozen soils. Williams, P.J., et al, 1982, 134p. + append., eng 41-3500
- Modeling of processes in landscape-geochemical systems. Sysuev, V.V., 1986, 301p., rus 41-3512
- Experiments on melting of unfixed ice in a horizontal cylindrical capsule. Webb, B.W., et al, 1987, p.454-459, eng 41-3756
- Calculating frost penetration into rocks of a cylindrical cavity. Dugartayrenov, A.V., et al, 1986, p.21-24, rus 41-3770
- Frost-heave analysis based upon a heat and water flow model. Fukuda, M., et al, 1986, p.83-97, jpn 41-3882
- Sublimation of a frozen semi-infinite porous medium. Fey, Y.C., et al, 1987, p.771-779, eng 41-3943
- Bottom ablation and heat transfer in the ice edge zone, 1983. Josberger, E.G., 1987, p.7012-7016, eng 41-4256
- Stability of a plane crystallization front moving at constant velocity. Badratnina, L.G., 1983, p.388-394, eng 41-4613
- See also: Permafrost heat transfer
- Heating**
- Water-source heat pumps. Phetteplace, G., 1986, p.14-15, eng 41-408
- Dynamic testing of a cryogenic heat pipe/radiator. Cenken, A.A., Jr., et al, 1978, p.105-110, eng 41-469
- Melting of a solid cylinder pressed against a heated wall. Martin, H., et al, 1986, p.1407-1415, eng 41-566
- Mathematical modeling of thermal regime of a building in annual cycle, for fuel economy in heating-cooling of premises. Makhalaia, Zh.I., 1986, p.86-89, rus 41-905
- Subsurface heating and melting of snow and ice. Krass, M.S., et al, 1986, p.27-38, rus 41-1634
- Heat pipe deicing apparatus. Matsuda, S., et al, 1981, 6 col., eng 41-1673
- Thermal performance of the building envelope. Tabunshchikov, I.U.A., et al, 1986, 400p., rus 41-1749
- Bulletin of scientific-technical information. Power engineering of Southern Yakutia. Petrov, N.A., ed, 1984, 32p., rus 41-1829
- Solar heating systems for low-rise buildings. Il'in, M.M., 1984, p.7-9, rus 41-1830
- Automatic anti-freeze system for solar water heaters. Bonnet, A., 1983, 10 col., eng 41-1980
- Heat pump control/defrost circuit. Noland, J.R., 1983, 10 col., eng 41-1983
- Control and method for defrosting a heat pump outdoor heat exchanger. Saunders, J.F., et al, 1982, 14 col., eng 41-1993
- Antenna deicing apparatus. Levin, H.L., 1981, 6 col. + 3 sheets, eng 41-2369
- Deicing system. Holwerda, S.J., 1980, 12 col. + 3 sheets, eng 41-2371
- Thermal environment around the Space Shuttle with hot-gas jets for ice suppression. Singhal, A.K., et al, 1986, p.547-553, eng 41-2738
- Ground surface temperature above underground heat-pipelines. Tikhomirov, A.L., et al, 1986, p.94-97, rus 41-2757
- Efficiency of using foam plastics as hydro-thermoinsulative materials for electrical heating plants. Valgin, V.D., et al, 1986, p.17-18, rus 41-2795
- Ice island underfoot. Chilingarov, A., et al, 1986, 175p., rus 41-3250
- Construction of heating networks in cold regions. Sypachev, G.G., et al, 1986, p.421-422, eng 41-4160
- See also: Concrete heating; Electric heating; Pipeline heating
- Heaving**
- See: Frost heave
- Heavy water**
- Thermodynamic properties of metastable systems and the kinetics of phase transformations. Nikitin, E.D., ed, 1985, 87p., rus 41-552
- Supercooling and crystallization of water, heavy water and organic substances. Bogdanov, N.M., et al, 1985, p.30-43, rus 41-553
- Ground ice origin from deuterium and heavy oxygen isotope content. Vasil'chuk, I.U.K., et al, 1985, p.66-68, rus 41-3536
- Isotope composition of ground ice on the Yamal Peninsula. Kritauk, L.N., et al, 1985, p.142-143, rus 41-3537
- Oxygen-isotope composition in the ocean-glacier system. Nikolaev, V.I., et al, 1985, p.172-174, rus 41-3538
- Height**
- See: Altitude
- Height finding**
- Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, 1986, p.1-12, eng 41-1469
- ERS-1 radar altimeter mission. Francis, C.R., 1986, p.287-295, eng 41-2702
- Helicopters**
- Correlation of icing relationships with airfoil and rotorcraft icing data. Flemming, R.J., et al, 1986, p.737-743, eng 41-802
- Coast Guard helicopter operations in polar regions. Wendt, P.A., 1986, p.165-173, eng 41-930
- Scheduled Arctic helicopter operations. Oxholm, O., 1986, p.295-320, eng 41-2033
- Development of helicopter operational capabilities in the Arctic. Wolfe-Milner, T., 1986, p.336-351, eng 41-2034
- Helicopter deicer control system. Adams, L.J., 1981, 18 col. + 7 sheets, eng 41-2368
- Rotorcraft icing technology—an update. Ward, R., et al, 1983, p.8(1)-(8)15, eng 41-3231
- Heterogeneous nucleation**
- Ice nucleating behaviour of PbI<sub>2</sub> in the presence of soluble salts. Gobinathan, R., et al, 1981, p.1527-1533, eng 41-2255
- X-ray diffraction and ice nucleation studies of AgI-AgCl solid solutions. Palanisamy, M., et al, 1986, p.1005-1009, eng 41-2467
- New horizontal gradient, continuous flow, ice thermal diffusion chamber. Tomlinson, E.M., et al, 1985, p.448-467, eng 41-3216
- High pressure ice**
- Difference in energy between cubic and hexagonal ice. Handa, Y.P., et al, 1986, p.7009-7010, eng 41-188
- Elastic properties and equation of state of high pressure ice. Shaw, G.H., 1986, p.5862-5868, eng 41-500
- Rheology of ice II and ice III from high-pressure extrusion. Echelmeyer, K., et al, 1986, p.693-696, eng 41-1261
- Partial phase diagram for the system NH<sub>3</sub>-H<sub>2</sub>O: the water-rich region. Johnson, M.L., et al, 1985, p.39-47, eng 41-1695
- Rheologies of H<sub>2</sub>O ices I(h), II, and III at high pressures: a progress report. Kirby, S.H., et al, 1985, p.89-107, eng 41-1699
- Creep of high-pressure ice VI. Sotin, C., et al, 1985, p.109-118, eng 41-1700
- Amorphous ice still a puzzle. Maddox, J., 1987, p.823, eng 41-3638
- High pressure tests**
- Rapid and high pressure freezing techniques in cryobiology. Menco, B.P.M., 1986, p.177-240, eng 41-1014
- Highways**
- See: Roads
- Himalaya Mountains**
- Forecasting snowmelt runoff of Himalayan rivers. Ramamoorthi, A.S., 1986, p.341-347, eng 41-3904
- Glaciological studies in Asiatic highland region during 1985-1986. Watanabe, O., et al, 1987, p.1-10, eng 41-3908
- Runoff in glacier-covered watersheds of Langtang Valley, Nepal. Fukushima, Y., et al, 1987, p.11-18, eng 41-3909
- Suspended sediments in a glaciated watershed of Langtang Valley, Nepal. Ohta, T., et al, 1987, p.19-24, eng 41-3910
- Stream water temperature observations in Langtang Khola, Nepal Himalayas. Suzuki, M., et al, 1987, p.25-28, eng 41-3911
- Winter runoff in Langtang Valley, Nepal Himalayas. Motoyama, H., et al, 1987, p.29-33, eng 41-3912
- Meteorological features in Langtang Valley, Nepal Himalayas, 1985-1986. Takahashi, S., et al, 1987, p.35-40, eng 41-3913
- Altitudinal dependence of precipitation in Langtang Valley, Nepal Himalayas. Seko, K., 1987, p.41-47, eng 41-3914
- Seasonal variation of snowline in Langtang Valley, Nepal Himalayas, 1985-1986. Morinaga, Y., et al, 1987, p.49-63, eng 41-3915
- Snow cover and dirt layer in the accumulation area of Yala Glacier, Nepal. Iida, H., et al, 1987, p.55-62, eng 41-3916
- Formation of dirt layers and surface dust by micro-plants in Yala Glacier, Nepal. Kohshima, S., 1987, p.63-68, eng 41-3917
- First glaciological expedition to West Kunlun Mountains 1985. Watanabe, O., et al, 1987, p.77-84, eng 41-3918
- Modern glaciers on the south slope of West Kunlun Mountains. Zhang, Z., et al, 1987, p.85-91, eng 41-3919
- Quaternary glaciation and paleogeography of West Kunlun Mountains. Zheng, B., 1987, p.93-102, eng 41-3920
- Permafrost and periglacial phenomena in West Kunlun Mountains of China. Li, S., 1987, p.103-109, eng 41-3921
- Discharge from a glacier in West Kunlun Mts., China. Nakawo, M., et al, 1987, p.111-114, eng 41-3922
- Hydrological data of Langtang Valley, Nepal Himalayas. Fukushima, Y., et al, 1987, p.115-120, eng 41-3923
- Meteorological data from Langtang Valley, Nepal Himalayas. Takahashi, S., et al, 1987, p.121-128, eng 41-3924
- Recent fluctuations of Rakhiot Glacier, Nanga Parbat, Punjab Himalayas, Pakistan. Gardner, J.S., 1986, p.527-529, eng 41-4308
- History**
- Antarctic science. Walton, D.W.H., ed, 1987, 280p., eng 41-3511
- Hoarfrost**
- Cloud liquid water in orographic storms. Rauber, R.M., et al, 1982, p.477-480, eng 41-61
- Surface temperature effect on ice splinter production. Griggs, D.J., et al, 1986, p.1254-1256, eng 41-1478
- Design of overhead lines to withstand climatic phenomena. Vieille, J., 1986, p.9-13, fre 41-1560
- Device for determining frost depth and density. Huneidi, F., 1983, 4 col., eng 41-1765
- Rime meteorology in the Green Mountains. Ryerson, C.C., 1987, 46p., eng 41-3144
- Probabilities of ice, wind and temperature loads on electrical transmission lines. Gartman, L.B., 1987, 200p., rus 41-3245
- Porous medium physical model of frost layers. Meng, F., et al, 1987, p.584-593, eng 41-3402
- Cloud rime regions for snow crystals that impact mountain tops in the Colorado Rockies. Hindman, E.E., 1984, p.67-70, eng 41-4373
- Secondary ice particle production by rime fragmentation and crystal breakup. Griggs, D.J., et al, 1984, p.199-202, eng 41-4392
- Role of low density rime growth in hail production. Farley, R.D., 1984, p.489-492, eng 41-4404
- See also: Depth hoar
- Holography**
- Under-snow radar using multifrequency holography. Sakamoto, Y., et al, 1986, p.111-118, eng 41-853
- Hot oil lines**
- Norman Wells Expansion Project—overview. Tibbatts, R.M., 1986, p.51-59, eng 41-2514
- Norman Wells Pipeline Project. Pick, A.R., 1986, p.61-66, eng 41-2515
- Scientific-technical preparation for economic development of Yamal Peninsula. 1987, p.31-34, rus 41-2784
- Houses**
- One-story residential buildings with monolithic foundation plates built on weak fills and frost-heaving ground. Grigor'ev, I.A., 1985, p.37-39, rus 41-292
- Foundation construction in complex engineering-geological conditions in Finland. Kushnir, I.N., et al, 1985, p.42-43, rus 41-295
- House for a cold city. Ross, J.F., 1985, p.20-24, eng 41-336
- In-situ assessment of two retrofit insulations. Flanders, S.N., 1986, p.32-44, eng 41-1377
- Improving the design of railroad routes. Turbinin, I.V., ed, 1984, 106p., rus 41-2453
- Planning the distribution of settlements when designing railroads for little-explored regions. Bykov, I.U.A., et al, 1984, p.34-41, rus 41-2454
- For northern construction sites. Malyshev, A.I.A., 1986, p.49-50, rus 41-2792
- Organizing construction of the Kureyskaya hydroelectric power plant. Zaltsman, O.M., et al, 1986, p.17-23, rus 41-2864
- Mobile dwellings for the North. Saprykina, N.A., 1986, 215p., rus 41-3012
- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., 1987, 208p., rus 41-3804
- Hovercraft**
- See: Air cushion vehicles
- Human factors**
- Geochemical exploration in economically developing parts of taiga. Zagoskin, V.A., et al, 1986, p.145-148, rus 41-200
- Behavior of frost susceptible soils in industrial regions. Shpolianskaia, N.A., et al, 1985, p.103-105, rus 41-326
- Economic development impact on river regimes in permafrost areas. Sokolov, B.L., 1986, p.3-11, rus 41-421
- Human activities impact on the biological activity of mountain soils. Alekseeva, I.V., et al, 1986, p.41-45, rus 41-456

**Human factors (cont.)**

- Algaeflora of the lower Yama River (Magadan Region). Kuz'min, G.V., [1986, p.513-521, rus] **41-391**
- Pollution protection of water resources in the Timan-Pechora Task Economic Complex. Brattsev, A.A., [1986, p.68-73, rus] **41-1170**
- Preliminary results of microbiological investigations at Mirnyy. Abyzov, S.S., et al, [1986, p.133-136, rus] **41-1270**
- Possible routes of pollution transport to the Arctic. Krasovskaya, T.M., [1986, p.93-96, rus] **41-1645**
- Man-induced erosion in Bol'shezemel'skaya tundra. Zharkova, I.U.G., [1986, p.94-98, rus] **41-1794**
- Mapping the distribution of polluted ground water in cryogenic hydrogeological structures. Volkova, V.P., et al, [1986, p.95-99, rus] **41-2088**
- Influence of anthropogenic disturbances on the temperature field of permafrost. Parmuzin, S.I.U., [1986, p.206-212, rus] **41-2102**
- Structure of the radiation and heat balance in Kologriv forest. Rudnev, N.I., [1986, p.72-87, rus] **41-2348**
- Preservation of high-altitude vegetation in the Altai-Sayan Mountains. Sedel'nikov, V.P., [1986, p.106-108, rus] **41-2441**
- Changes in engineering-geocryological conditions induced by economic development. Nevecheria, V.L., et al, [1986, p.184-191, rus] **41-2839**
- Landscape approach to forecasting cryogenic processes. Stashenko, A.I., [1986, p.191-199, rus] **41-2840**
- Interrelationships among components of biogeocenoses in southern taiga. Smirnov, A.V., ed, [1986, 120p., rus] **41-2898**
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed, [1986, 165p., rus] **41-2912**
- Natural revegetation of subpolar mountain areas affected by industry. Martynenko, V.A., [1986, p.1663-1668, rus] **41-3026**
- Changes in chemical composition of meltwater in areas of intensive human activities. Dvornikova, L.L., et al, [1986, p.60-68, rus] **41-3210**
- Environmental protection in Siberia. Vorob'ev, V.V., [1985, p.52-60, rus] **41-3436**
- Rational use and preservation of ecosystems in the North. P'yavchenko, N.I., [1985, p.68-75, rus] **41-3437**
- Microbiology of human pollution at Showa Station. Toyoda, S., et al, [1985, p.541-546, jpn] **41-3568**
- Antarctic terrestrial ecosystem. Walton, D.W.H., [1987, p.83-93, eng] **41-3740**
- Aerosol properties in the atmospheric surface layer in Severnaya Zemlya archipelago. Timerev, A.A., [1986, p.108-113, rus] **41-3867**
- Estimation of industrial emission into the atmosphere. Boiarkina, A.P., et al, [1987, p.14-23, rus] **41-3945**
- All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] **41-3974**
- Revegetation of West Siberian forests. Vorob'ev, V.N., ed, [1985, 103p., rus] **41-3979**
- Changes induced by industrial activities in the Upper Kolyma basin. Grigor'eva, N.N., et al, [1986, p.9-13, rus] **41-4467**
- Pollution impact on the environmental functions of northern taiga. Chertovskoi, V.G., [1987, p.67-72, rus] **41-4569**
- Influence of industrial wastes on vegetation of northern forest ecosystems. Egorova, V.N., et al, [1987, p.143-147, rus] **41-4570**
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernen'kova, T.V., [1987, p.147-157, rus] **41-4571**
- Human factors engineering**
- Geocryological research. Ershov, E.D., ed, [1986, 224p., rus] **41-2080**
- Ecologic problems of protecting living organisms in northern seas. Matishov, G.G., et al, [1986, p.13-16, rus] **41-2387**
- Combined use of vegetational resources in the north European USSR. Chertovskoi, V.G., [1985, p.26-31, rus] **41-3434**
- Natural associations of the Arctic and their protection. Korotkevich, E.S., ed, [1986, 120p., rus] **41-3860**
- Reserved zones of Franz Josef Land. Uspenski, S.M., et al, [1986, p.7-18, rus] **41-3861**
- Regionalization of the permafrost zone for environmental protection purposes. Chizhov, A.V., et al, [1986, p.39, rus] **41-3975**
- Humidity**
- Ice crystal growth form and mechanism at low atmospheric saturation. Gonda, T., et al, [1986, p.30-37, eng] **41-3655**
- Humidity of air in Antarctica. Zav'ialova, I.N., [1986, p.92-101, eng] **41-3953**
- Hummocks**
- Nature of origin of earth hummocks, Breisterdalen, Jotunheimen/Norway. Bolster, S.J.S., [1985, p.94-115, eng] **41-586**
- Effect of fertilizer on production of tussock tundra, Alaska. Shaver, G.R., et al, [1986, p.261-268, eng] **41-1175**
- Origin of palsas. Seppälä, M., [1986, p.141-147, eng] **41-1872**
- Reproduction of *Eriophorum vaginatum* by seed in Alaskan tussock tundra. Gartner, B.L., et al, [1986, p.1-18, eng] **41-2188**
- Environmental control of nutrients in Alaskan tussock tundra. Chapin, F.S., III, et al, [1986, p.167-195, eng] **41-2189**
- Seasonal growth and biomass in hummocks of Alaskan tussock tundra. Shaver, G.R., et al, [1986, p.257-278, eng] **41-2190**
- Development of Holocene peat hummocks in northwestern Siberia. Vasil'chuk, I.U.K., et al, [1986, p.123-128, rus] **41-2828**
- Hydrates**
- Gas hydrates and Arctic offshore research. [1986, 241p., eng] **41-365**
- Overview: Arctic and offshore research. Shoemaker, H.D., [1986, p.59-62, eng] **41-366**
- Repulsive regularities of water structure in ices and crystalline hydrates. Savage, H.F., et al, [1986, p.717-720, eng] **41-617**
- Clathrate hydrates in the solar system. Miller, S.L., [1985, p.59-79, eng] **41-1697**
- Icy satellites, rings and Pluto. Klinger, J., [1985, p.621-629, eng] **41-1727**
- Atmospheres of icy bodies. Owen, T., [1985, p.731-740, eng] **41-1734**
- Interaction of liquid hydrocarbons and water-ice or ammonia hydrates. Lunine, J.I., et al, [1985, p.741-757, eng] **41-1735**
- Summary of the highlights of the conference. Smoluchowski, R., [1985, p.859-864, eng] **41-1742**
- Guest molecule size effect on behavior of clathrate hydrates. Andersson, P., et al, [1983, p.1423-1432, eng] **41-2246**
- Interaction between cryolithozone and natural gases of the underground hydrosphere. Romanovskii, N.N., [1986, p.3-17, rus] **41-2543**
- Calculation of hydrate formation in gas wells drilled in permafrost. Malyshev, A.G., et al, [1986, p.21-23, rus] **41-3772**
- Hydraulic fill**
- Stresses in the hydraulic backfill. Knutsson, S., [1981, p.261-268, eng] **41-796**
- See also: Earth fills; Rock fills
- Hydraulic jets**
- Hydrojet drilling technology for permafrost. Petrosian, L.R., et al, [1986, p.39-41, eng] **41-1849**
- Ice destruction. Methods and technology. Bogorodskii, V.V., et al, [1986, 214p., eng] **41-2564**
- Ice penetration drill/anchor using ultrahigh-pressure waterjets. Echert, D.C.S., et al, [1986, p.605-617, eng] **41-2679**
- Water jet ice penetration. Gregory, W.E., et al, [1986, p.619-622, eng] **41-2680**
- Drilling and slotting of ice and permafrost with water jets. Vijay, M.M., et al, [1986, p.177-187, eng] **41-2936**
- Failure of frozen soils by high-pressure hydraulic jets in trench and pit construction. Petrosian, L.R., et al, [1986, p.194-197, eng] **41-2946**
- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed, [1986, 81p., rus] **41-4546**
- Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams. Mironov, V.P., et al, [1986, p.3-7, rus] **41-4547**
- Hydraulic structures**
- Increasing the service life of hydraulic structures. Gavrilenko, V.I., et al, [1985, p.61-63, rus] **41-306**
- Concrete for high dams. Sudakov, V.B., ed, [1985, 101p., rus] **41-413**
- Concrete with complex admixtures for the Sayano-Shushenskaya dam. Ginzburg, T.S.G., et al, [1985, p.71-73, rus] **41-419**
- State of stress and thermal stresses in concrete and reinforced concrete of hydraulic structures. Karavaev, A.V., ed, [1985, 104p., rus] **41-428**
- Underground rock temperatures at the Kolyma power plant. Kuznetsov, V.S., et al, [1985, p.26-29, rus] **41-429**
- Flood water stresses on the protective hydraulic structures of Leningrad. Konstantinova, R.G., et al, [1985, p.88-91, rus] **41-430**
- Waterproofing and corrosion prevention in hydraulic structures. Shchavlev, N.F., ed, [1985, 100p., rus] **41-431**
- Stresses in impervious screens induced by waves and adhered ice. Stabnikov, N.V., et al, [1985, p.33-38, rus] **41-432**
- Polymer cavitation-resistant coatings of the Bratsk Dam spillway. Dymant, A.N., et al, [1985, p.58-63, rus] **41-433**
- Corrosion resistance of steel cores of earth dams. Kuznetsov, V.S., et al, [1985, p.63-68, rus] **41-434**
- Loess deposits of the USSR. Sergeev, E.M., ed, [1986, 2 volumes (only Vol.2 pertinent), rus] **41-620**
- Influence of geocryological conditions of the construction site on the design of the Vilyuy Hydroelectric Power Plant No.3. Ziskovich, V.Kh., et al, [1986, p.53-55, rus] **41-987**
- Engineering and geological investigations of saline soils. Bakenov, B.B., et al, [1986, 245p., rus] **41-996**
- Basic problems of power supply in the North. Ryl'skii, V.A., et al, [1986, p.86-93, rus] **41-1205**
- Examples of dam construction in Siberia and the Far North. Kolmogorov, R.I., [1973, p.53-62, rus] **41-1276**
- Ice movement velocity at localized water-level drops above spillway outlets. Raspopin, G.A., et al, [1986, p.71-74, rus] **41-1395**
- Selection of optimal dimensions for hydraulic structures in ports. Piniagin, B.A., et al, [1986, p.77-81, rus] **41-1396**
- Power plant construction on permafrost. Shtelman, A.Sh., [1986, p.8-12, rus] **41-1400**
- Field studies of the Neryungri earth dam. Belan, V.I., et al, [1986, p.18-20, rus] **41-1402**
- Influence of cryogenic phenomena on the performance of monolithic, concrete, filterless reinforcement of slopes of cohesive-earth dams. Kanarskii, V.F., et al, [1986, p.41-43, rus] **41-1403**
- Salt and frost heave damage of lining in hydraulic structures. Wang, Y., [1986, p.291-294, chi] **41-1433**
- Frost heave damage control in hydraulic structures. Wei, G., [1986, p.295-298, chi] **41-1434**
- Frost damage and prevention in hydraulic structures. Qi, Z., et al, [1986, p.299-304, chi] **41-1435**
- Anti-heave technology survey for hydraulic structures. Chen, X., [1986, p.305-308, chi] **41-1436**
- Concrete linings of hydraulic structures to prevent frost heave. Zhu, C., [1986, p.309-312, chi] **41-1437**
- Frost damage of a channel with concrete lining. Luo, Y., [1986, p.313-318, chi] **41-1438**
- Protection of structures from pressure of moving sea ice. Ice tests performed at the "Kemi" lighthouse. [1985, p.19, rus] **41-1514**
- Welded groove-and-tongue profiles for high strength bulwarks. Kuznetsov, A.I., et al, [1986, p.26-28, rus] **41-1534**
- Calculating the ultimate balance of a mudflow mass. Kukhalashvili, E.G., et al, [1985, p.373-376, rus] **41-1625**
- Results of laboratory investigations of newly designed mudflow control structures of semi-cylindrical form. Gavardashvili, G.V., [1986, p.169-171, rus] **41-1626**
- Calculating pile foundations for hydraulic structures. Levachev, S.N., et al, [1986, 133p., rus] **41-1747**
- Concrete with unsorted sand-gravel for cold regions. Sadovich, M.A., et al, [1986, p.50-53, rus] **41-1924**
- Resistance of massive concrete structures to thermal cracking. Trapeznikov, L.P., [1986, 271p., rus] **41-1986**
- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., [1986, p.92-94, rus] **41-2161**
- Strength of granular ice. Deriugin, A.G., et al, [1986, p.129-134, rus] **41-2165**
- Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice. Tregub, G.A., et al, [1986, p.153-158, rus] **41-2169**
- Experience in ice dam construction. Vdovin, I.U.I., et al, [1986, p.177-183, rus] **41-2174**
- Project of the experimental Yamberg ice-core dam. Danielian, I.U.S., et al, [1986, p.183-189, rus] **41-2175**
- Ice research and problems of hydraulic construction in cold regions. Sparboom, U., [1984, p.1511-1513, ger] **41-2256**
- Towards the understanding of steady tilt phenomenon in semi-submersibles. Atlar, M., [1987, p.139-149, eng] **41-2415**
- Ice impacts on semisubmersibles. Lindberg, K., et al, [1987, p.313-320, eng] **41-2438**
- Observation of a model-scale semisubmersible in pack ice. Szeto, K., et al, [1987, p.341-350, eng] **41-2441**
- Determination of the ice load on elements of marine hydraulic structures. Gol'din, A.L., et al, [1987, p.417-420, eng] **41-2601**
- Ice blasting. Tavrizov, V.M., [1986, 136p., rus] **41-2646**
- Hydraulic construction in ports and engineering research in coastal zones of seas. Kostjukov, V.D., ed, [1986, 169p., rus] **41-2709**
- Interaction of pressure ridges with cylindrical supports of hydraulic structures. Belov, A.B., et al, [1986, p.34-37, rus] **41-2710**
- Stress-strain state of the Sayano-Shushenskoe dam during filling of the reservoir. Aleksandrovskaya, E.K., [1986, p.123-129, eng] **41-2713**
- Allowing for stream and ice dynamics when calculating ice breakup on concentrated overfalls. Fomichev, B.S., [1986, p.83-87, rus] **41-2755**
- Designing moorings built of fused enlarged blocks. Goncharov, V.V., et al, [1986, p.25-26, rus] **41-2788**
- Experimental use of rolled concrete mixtures in freezing weather. Vasil'evskii, V.V., et al, [1987, p.8-12, rus] **41-2798**
- Organizing construction of the Kureyskaya hydroelectric power plant. Zalt'sman, O.M., et al, [1986, p.17-23, rus] **41-2864**
- Passing of ice and construction wastes at the Kureyskaya site. Zalt'sman, O.M., et al, [1986, p.23-27, rus] **41-2865**



- Design and construction of the sole part of the Kureyskaya channel dam. Makarov, V.A., et al, [1986, p.27-31, rus] 41-2866
- Concrete work at the Kureyskaya power plant site. Bukhman, V.I., [1986, p.50-54, rus] 41-2869
- Construction of structures and foundations by the grout curtain method. Smorodinov, M.I., et al, [1986, 216p., rus] 41-2886
- Morphology and lithogenesis of rock streams. Govorushko, S.M., [1986, 120p., rus] 41-2901
- Studies and calculations in structural design and building technology of hydraulic transport structures. Shkol'nikov, I.E., ed, [1986, 96p., rus] 41-2908
- Improvement of technology and quality control of concreting moorings in the northeastern Ob-Irtys' Basin. Poliakov, B.I., et al, [1986, p.59-68, rus] 41-2910
- Dredge excavation of ground. Ogorodnikov, S.P., [1986, 256p., rus] 41-2913
- Methods of protecting hydraulic structure concretes from frost. Davidenko, V.M., et al, [1986, p.293-299, eng] 41-2940
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Risk assessment for iceberg-scour damage: Labrador Sea and Grand Banks. Allan, D., [1986, p.240-248, eng] 41-3116
- Some recent studies relating to the determination of pipeline depths. Marcellus, R.W., et al, [1986, p.295-303, eng] 41-3122
- Ice-scour research: long-term plan for ESRF. Livingstone, W.R., [1986, p.307-313, eng] 41-3123
- Construction of deep foundations. Giotov, N.M., et al, [1985, 248p., rus] 41-3125
- Geomechanical studies of power supply structure foundations. Sapagin, D.D., ed, [1985, 120p., rus] 41-3126
- Corps of engineers seek ice solutions. Frankenstein, G.E., [1987, p.5-7, eng] 41-3140
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al, [1987, 272p., rus] 41-3145
- Calculating the non-erosive velocity of a stream for sandy ground in freezing weather. Skrebkov, G.P., et al, [1986, p.74-77, rus] 41-3260
- Thermal regime and stresses in concrete dams in permafrost areas. Epifanov, A.P., et al, [1987, p.35-37, rus] 41-3268
- Rational utilization and preservation of ground water in the Buryat ASSR. Rezanov, I.N., ed, [1986, 114p., rus] 41-3330
- Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR. Adushinov, A.A., [1986, p.52-59, rus] 41-3331
- Water resources of the Yakut ASSR and their use. Nogovitsyn, D.D., [1985, 124p., rus] 41-3432
- Engineering geocryology in hydraulic construction. Bikanov, G.F., ed, [1986, 205p., rus] 41-3439
- Prospects and problems of hydraulic power construction in the North. Bikanov, G.F., et al, [1986, p.5-12, rus] 41-3440
- Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000. Kudoiarov, L.I., [1986, p.13-23, rus] 41-3441
- Problems of engineering geocryology in hydraulic construction. Tsytovich, N.A., et al, [1986, p.23-29, rus] 41-3442
- Engineering and geological conditions of construction and operation of hydraulic structures built on perennially frozen hard rocks. Kagan, A.A., et al, [1986, p.34-44, rus] 41-3444
- Influence of temperature regime and ice content on deformation of embankments built of coarse-clastic soils. Gavrilov, A.N., [1986, p.44-53, rus] 41-3445
- Building hydraulic structures on perennially frozen rocks. Novikov, N.F., [1986, p.62-66, rus] 41-3447
- Cryogenic processes and the stability of tailing-dumps built on permafrost bases. Kuznetsov, G.I., [1986, p.67-75, rus] 41-3448
- Forecasting temperature and moisture regime of rock-earth fill dams. Bogoslovskii, P.A., et al, [1986, p.89-96, rus] 41-3451
- Using frozen ground in dam construction in permafrost areas. Kuznetsov, G.I., et al, [1986, p.128-141, rus] 41-3456
- Temperature and moisture regime of the Vilyuy power plant dam. Olovin, B.A., [1986, p.151-161, rus] 41-3458
- Construction of water-raising ice dams. Makarov, V.I., et al, [1986, p.161-171, rus] 41-3459
- Building stone-earth-fill dams in the North. Kogodovskii, O.A., [1986, p.171-182, rus] 41-3460
- Designing earth dams for permafrost regions. Anisimov, V.A., [1986, p.183-189, rus] 41-3461
- Underground hydraulic structures in permafrost. Gevirts, G.I.A., et al, [1986, p.190-197, rus] 41-3462
- Tidal power plants. Bernshetf, L.B., et al, [1987, 296p., (Pertinent p.239-273), rus] 41-3675
- Maximum river runoff in the Angara basin. Leksakova, V.D., [1987, 132p., rus] 41-4108
- Methods of acting on the state of stress of massive concrete hydraulic structures. Garkun, L.M., et al, [1987, 111p., rus] 41-4123
- Making concrete dams monolithic by cementing structural joints. Argal, E.S., [1987, 119p., rus] 41-4150
- Hydraulic engineering. [1987, 1162p., eng] 41-4220
- Seasonally active ground cooling devices used in hydraulic construction. Buchko, N.A., [1983, p.29-40, rus] 41-4473
- Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed, [1986, 135p., rus] 41-4572
- Prospects and possible consequences of hydraulic meliorations in western Siberia. Malik, L.K., [1986, p.77-89, rus] 41-4573
- See also: Dams; Docks; Locks (waterways); Offshore structures; Piers; Sluices (hydraulic engineering); Wharves
- Hydraulics
- Energy loss of snow/water mixture flow at a T-junction of pipes. Shirakashi, M., et al, [1986, p.75-82, jpn] 41-440
- Hydraulics of river ice. Shen, H.T., [1985, 78p., eng] 41-2935
- Hydraulic engineering. [1987, 1162p., eng] 41-4220
- Mathematical model for river ice. Shen, H.T., et al, [1987, p.141-146, eng] 41-4221
- Hydraulics of subglacial cavities. Walder, J.S., [1986, p.439-445, eng] 41-4299
- Hydraulic conveying of snow. Tokunaga, Y., et al, [1987, p.59-66, jpn] 41-4320
- Sediment transport in the Susitna River basin, Alaska, 1983-1984. Knott, J.M., et al, [1986, 73p., eng] 41-4323
- Hydrocarbons
- Phase transitions in solid methane at high pressure. Trapeniers, N.J., [1985, p.49-58, eng] 41-1696
- Hydrocarbons and future exploitation in Norwegian and Barents Seas. Bergsager, E., [1986, p.64-93, eng] 41-2266
- Hydrocarbon activities in Greenland. Christensen, M., [1986, p.94-110, eng] 41-2267
- Development of hydrocarbon resources in ice-covered areas: an overview. Gulmizarov, V., [1986, p.111-123, eng] 41-2268
- Tomorrow's technology in sub-Arctic and Arctic hydrocarbon exploration. Adams, P.F., [1986, p.312-316, eng] 41-2281
- General viewpoints on hydrocarbon developments in northern regions. Howard, M.W., [1986, p.317-323, eng] 41-2282
- Circum-Arctic petroleum potential. Green, A.R., et al, [1986, p.101-130, eng] 41-2606
- Alaska: potential for giant fields. Hohler, I.J., et al, [1986, p.131-142, eng] 41-2607
- Oil and gas fields in the East Coast and Arctic basins of Canada. Meneley, R.A., [1986, p.143-176, eng] 41-2608
- Polynuclear hydrocarbon concentrations from oil spilled in seawater. Vukobratovic, L., [1986, 15p., spa] 41-3999
- Bibliography of hydrocarbon development in the Yukon region, Canada. Cameron, N.P., comp, [1986, 536p., eng] 41-4639
- Hydrodynamics
- Hydrodynamic loads during ice-clogging of a propeller. Lindroos, H., et al, [1986, p.1061-1092, eng] 41-1146
- Conceptual oil dispersion modeling, lower Cook Inlet-Shelikof Strait. Schleuter, R.S., et al, [1984, p.389-469, eng] 41-1783
- Mechanics of plains rivers. Blench, T., [1986, 111p., eng] 41-2078
- Hydrodynamic forces and iceberg stability. Bass, D.W., et al, [1986, p.60-62, eng] 41-3092
- Hydroelectric power
- See: Electric power
- Hydrogen
- Oxygen isotope composition of syngenetic ice wedges (analytical data, problems of paleoclimatic reconstruction). Vasil'chuk, I.U.K., et al, [1986, p.107-119, rus] 41-3775
- Hydrogen bonds
- Nature of the 'free' OH groups in water. Giguère, P.A., et al, [1986, p.341-344, eng] 41-525
- Repulsive regularities of water structure in ices and crystalline hydrates. Savage, H.F., et al, [1986, p.717-720, eng] 41-617
- Extended lattice model of water; two-sublattice, two-orientation model. Meijer, P.H.E., et al, [1982, p.124-142, eng] 41-2245
- Electronic structure of hydrogen-bonded H<sub>2</sub>O. Schmeisser, D., et al, [1986, p.3279-3286, eng] 41-2318
- Dielectric studies of RbOH-doped ice and its phase transition. Kawada, S., et al, [1986, p.4485-4491, eng] 41-2468
- Neutron scattering of supercooled water in silica gels. Poinssignon, C., et al, [1986, p.3447-3459, eng] 41-2479
- O-H stretching vibrations of coupled O-D—O-D pairs in H<sub>2</sub>O ice Ic. Whalley, E., et al, [1987, p.7244-7245, eng] 41-3760
- OH and OD stretching fundamentals of isotopically dilute HDO in ice Ih. Falk, M., [1987, p.28-30, eng] 41-4054
- Hydrogeology
- Engineering and geological investigations of saline soils. Bakenov, B.B., et al, [1986, 245p., rus] 41-996
- Characteristics of a glacial valley in the North Italian Dolomites. Van de Griend, A.A., et al, [1986, p.275-299, eng] 41-2698
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, [1987, 166p., rus] 41-3649
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, [1987, p.4-65, rus] 41-3650
- Ground water formation in southern Tyumen' region. Soloboeva, L.A., [1987, p.131-136, rus] 41-3651
- Hydrography
- Studying hydrographic indices of rivers in the Irtys' area taiga. Trofimova, E.V., [1986, p.66-71, rus] 41-812
- Ross Sea oceanography, 1985. Pillsbury, R.D., et al, [1985, p.112-113, eng] 41-2951
- Large-scale oceanography in Fram Strait during the 1984 Marginal Ice Zone Experiment. Quadfasel, D., et al, [1987, p.6719-6728, eng] 41-4232
- Density nutrients and phytoplankton in the ice edge zone of the Weddell-Scotia Sea. Nelson, D.M., et al, [1987, p.7181-7190, eng] 41-4270
- Spring runoff processes in Åstfjorden, Norway. Englund, J.-O., [1986, p.1-20, eng] 41-4512
- Hydrologic cycle
- Hydrology of a wetland in the continuous permafrost region. Roulet, N.T., et al, [1986, p.73-91, eng] 41-2700
- Hydrology
- Winter and summer low flows in Finland. Kuusisto, E., [1986, p.31-38, eng] 41-535
- Hydrologic instrumentation facilities. Wagner, C.R., [1986, p.209-218, eng] 41-538
- Hydrologic conditions in the Klatt Bog area, Anchorage, Alaska. Glass, R.L., [1986, 19p., eng] 41-798
- Possibility of distinguishing landscape types and evaluating their hydrologic properties from space photographs. Markus, I.A.A., [1986, p.153-159, rus] 41-1373
- Hydrologic conditions Connors Bog area, Anchorage, Alaska. Glass, R.L., [1986, 23p., eng] 41-2196
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270
- Water resources of Alaska. Snyder, E.F., comp., [1987, 24p., eng] 41-3338
- Seasonal water budget models, Quebec, Canada. Wright, R.K., [1984, p.125-141, eng] 41-3354
- Forest hydrology and watershed management. Swanson, R.H., ed, [1987, 625p., eng] 41-4313
- See also: Glacial hydrology; Permafrost hydrology; Snow hydrology; Surface waters
- Hydrometeors
- See: Precipitation (meteorology)
- Hydrothermal processes
- Geologic conditions of the burial of Pleistocene glacier ice in the Yenisey River area. Astakhov, V.I., [1986, p.72-78, rus] 41-108
- Development of frost heave deformations in freezing, coarsely clastic ground. Petrova, M.A., et al, [1985, p.89-91, rus] 41-319
- Studying frost heave in Chita City. Ivin, I.A., [1985, p.110, rus] 41-330
- Methods of geomorphological field experiments in the USSR. Dedkov, A.P., ed, [1986, 160p., rus] 41-1197
- Slow hydrothermal movements of soil and ground masses on slopes (creep). Dedkov, A.P., et al, [1986, p.77-90, rus] 41-1198
- Formation of segregated ice and frost heave of clays. Zamolotchikova, S.A., [1986, p.127-136, rus] 41-2093
- Development and regime of thermal erosion in the BAM zone. Poznanin, V.L., [1986, p.138-142, rus] 41-2831
- Physical geocryology. Shvetsov, P.F., et al, [1986, 177p., rus] 41-2885
- Hydrothermal regime of taiga and tundra soils of northeastern Europe. Kononenko, A.V., [1986, 145p., + inserts, rus] 41-3246
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] 41-3249
- Predicting the erosion of perennially frozen fines. Malinovskii, D.V., [1987, p.63-68, rus] 41-3397
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] 41-3433
- Problems of engineering geocryology in hydraulic construction. Tsytovich, N.A., et al, [1986, p.23-29, rus] 41-3442
- Temperature and moisture regime of the Vilyuy power plant dam. Olovin, B.A., [1986, p.151-161, rus] 41-3458
- Nival-glacial relief-forming processes in the BAM zone. Plastinin, L.A., et al, [1986, p.82-86, rus] 41-3519
- Buried Pleistocene glacier ice on the Yenisey River. Astakhov, V.I., [1985, p.286-295, eng] 41-3619
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, [1987, 166p., rus] 41-3649
- Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., [1986, 78p., rus] 41-4523

**Hygroscopic water**

- Moisture in hygroscopic materials. Efimov, S.S., [1986, 160p., rus] **41-1044**
- Bound water and ice transformations in rock and ground systems. Ershov, E.D., [1986, p.8-18, rus] **41-2081**
- Binding modes of water in plant leaves: a dielectric study. Pissis, P., et al., [1987, p.119-125, eng] **41-2223**
- Freezing of water and melting of ice in disperse rocks. Ershov, E.D., [1986, p.55-67, eng] **41-3016**
- Protective forest strips in cold dry steppes. Lamin, L.A., [1985, p.79-87, rus] **41-3981**

**Hypothermia**

See: Cold exposure

**Ice**

- Russian-English Arctic environment glossary. [1985, 150p., rus] **41-1897**
- Science in Antarctica, Vol.9: Data compilation. [1985, 288p., jpn] **41-1918**
- Extended lattice model of water; two-sublattice, two-orientation model. .veijer, P.H.E., et al., [1982, p.124-142, eng] **41-2245**
- Basic methods and principal results of studying the role of physical, chemical and biologic factors in the cleaning of Arctic waters and ice from petroleum hydrocarbons. Il'inskiĭ, V.V., et al., [1986, p.171-173, rus] **41-2390**
- Guide for extreme cold weather operations. Barclay, D.D., comp., [1986, c450p., eng] **41-2483**
- Russian-English Arctic environment glossary. [1987, 219p., eng] **41-2887**
- Some current problems in geocryology. Vtiurin, B.I., et al., [1972, p.17-25, rus] **41-3746**
- Adfreezing of the materials of skis' sliding surfaces to snow and ice. Ermakov, K.K., [1984, p.10-12, rus] **41-4506**

See also specific types of ice

**Ice accretion**

- Observation of ice aggregation at temperatures near -50 C. Stickel, P.G., [1982, p.226-229, eng] **41-22**
- Volcanism and glaciers in the Anthropocene. Melekestsev, I.V., [1986, p.27-35, rus] **41-102**
- Segregation or buried ice in the "Ledianaya Gora" deposit. Vtiurin, B.I., et al., [1986, p.35-43, rus] **41-103**
- Wind effect on artificial ice formation in sprinkler cones. Sosnovskii, A.V., [1986, p.225-230, rus] **41-140**
- Helicopter Spray System (HISS) evaluation and improvements. Belte, D., et al., [1986, 148p., eng] **41-454**
- Some relationship between antarctic ice extent and climate. Peng, G., et al., [1983, p.303-309, chi] **41-673**
- Modeling of spray ice accretion experiments. Sackinger, W.M., [1986, p.487-491, eng] **41-952**
- Freeze protection of ships and shipborne equipment. Roberts, J., et al., [1986, p.500-542, eng] **41-954**
- Ice management for year-round operating marine terminals. Tsinker, G.P., [1986, p.409-435, eng] **41-1110**
- Sea spray icing on marine units. Jørgensen, T.S., [1986, p.447-470, eng] **41-1112**
- Adhesive strength of spray accreted ice on materials and coatings. Lyyra, M., et al., [1986, p.484-496, eng] **41-1114**
- Computer modelling of ice accretion and control of icing on marine units. Løset, S., et al., [1986, p.497-511, eng] **41-1115**
- Forecast of ice accretion on marine structures. Jessup, R.G., [1985, 90p., eng] **41-1194**
- Using image recognition in classifying conditions of icing. Gorlach, I.A., [1985, p.62-71, rus] **41-1196**
- Arctic thermal design. Lunardini, V.J., [1985, p.70-75, eng] **41-1327**
- Density of accreted ice. Prodi, F., et al., [1986, p.1081-1090, eng] **41-1476**
- Ice accretions on fixed cylinders. Prodi, F., et al., [1986, p.1091-1109, eng] **41-1477**
- Ice accretion measurement on a wire at Mt. Washington. McComber, P., et al., [1985, p.34-43, eng] **41-1482**
- Overhead line icing. Fernet, M., [1986, p.2-8, fre] **41-1559**
- Polymorphism in vapor deposited amorphous solid water. Mayer, E., et al., [1985, p.81-88, eng] **41-1698**
- Formula for calculating ice and wind loads on wires. Gonchar, L.G., et al., [1986, p.37-38, rus] **41-1923**
- Dynamics of temperature fields during accretion of floating ice. Bondarev, E.A., et al., [1986, p.39-42, rus] **41-2152**
- Accumulation and preservation of massive artificial sea ice. Kamenskii, R.M., et al., [1986, p.167-172, rus] **41-2172**
- Report on Solunzan wind hole and ice accretion mechanism. Fujiwhara, S., [1986, p.261-266, eng] **41-2331**
- Possibility of forecasting the intensity of ice accretion. Volevskha, V.A., et al., [1986, p.58-67, rus] **41-2638**
- Icing and wind loading on a simulated power line. Govoni, J.W., et al., [1986, p.23-27, eng] **41-2967**
- Different domains of application of cold. Manual. Bykov, A.V., et al., [1985, 271p. (Perinent p.: 42-66, 99-125, 222-260), rus] **41-3154**
- Potential flow analysis of glaze ice accretions on an airfoil. Zaguli, R.J., [1984, 87p., eng] **41-3254**

- Effects of simulated ice on the performance of an airfoil. Zaguli, R.J., et al., [1984, 183p., eng] **41-3255**
- Radioactive isotopes related to ice sheet accumulation and ablation. Lal, D., et al., [1987, p.4947-4952, eng] **41-3343**
- Superstructure icing in relation to ship safety and operations, Canada. Holburn, J.G., et al., [1986, 106p., eng] **41-3374**
- Detectors of icing on overhead power lines. Mamin, F.N., et al., [1987, p.49-51, rus] **41-3612**
- Ice accretion on cables of various cross-sections. Baker, P.C., et al., [1986, p.11-28, eng] **41-3796**
- Riiser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al., [1986, p.23-31, eng] **41-4094**
- Riiser-Larsen oxygen isotopes and accumulation rates. Orheim, O., et al., [1986, p.33-47, eng] **41-4095**
- NASA's aircraft icing analysis program. Shaw, R.J., [1986, 26p., eng] **41-4157**
- Dynamics of the freezing over of underground pipes. Krasovitskii, B.A., [1987, p.1331-1337, eng] **41-4162**
- Mass balance of the McCall glacier in Alaska. Trabant, D.C., et al., [1986, p.40-49, 157-165, rus] **41-4338**
- Supercooled liquid water in winter orographic clouds. Henderson, T.J., [1984, p.19-24, eng] **41-4370**
- Laboratory simulations of graupel growth. Griggs, D.J., et al., [1984, p.163-166, eng] **41-4382**
- Properties of ice accreted in a two stage growth. Prodi, F., et al., [1984, p.283-286, eng] **41-4401**
- Icing of cylinders in a wind tunnel. Bain, M., et al., [1984, p.733-736, eng] **41-4414**
- Role of ice crystals on ice accretion processes. Gayet, J.F., et al., [1984, p.737-740, eng] **41-4415**
- Atmospheric icing load measurements on a cable using the end tension. McComber, P., et al., [1987, p.131-141, eng] **41-4490**
- Modelling ice accretion on non-rotating cylinders. Szilder, K., et al., [1987, p.177-191, eng] **41-4494**
- Study of sea-spray icing of communications antennas—exploratory (NSAP project Q-5-79). [1981, 43p. + appendix., eng] **41-4636**
- See also: Icing rate
- Nearfield noise measurements from an Arctic pressure ridge. Buck, B.M., et al., [1986, p.256-264, eng] **41-1029**
- Non-Gaussian noise as the background interference in telecommunication. Nuttall, A.H., et al., [1986, 161p., eng] **41-2072**
- Acoustic emission study on multi-year sea ice in an arctic field laboratory. Sinha, N.K., [1985, p.S290-S293, eng] **41-2309**
- Ocean dynamics and acoustic fluctuations in the Fram Strait marginal ice zone. Dyer, I., et al., [1987, p.435-436, eng] **41-2805**
- Ultrasonic attenuation and dislocation damping in crystals of ice. Tamura, J., et al., [1986, p.3445-3461, eng] **41-2975**
- Analysis of acoustical features of laboratory grown sea ice. Stanton, T.K., et al., [1986, p.1486-1494, eng] **41-3068**
- Measurement of the speed of sound in ice. Smith, A.C., et al., [1986, p.1713-1715, eng] **41-3071**
- Acoustic radar detection of icebergs in pack ice. Marko, J.R., [1987, 135p., eng] **41-3413**
- Ice adhesion**
- Observation of ice aggregation at temperatures near -50 C. Stickel, P.G., [1982, p.226-229, eng] **41-22**
- Adhesion and physical properties of sea spray ice. Sackinger, W.M., et al., [1986, p.81-89, eng] **41-368**
- Bond and slip of steel bars in frozen sand. Alwahhab, R.M., [1983, 361p., eng] **41-898**
- Adhesive strength of spray accreted ice on materials and coatings. Lyyra, M., et al., [1986, p.484-496, eng] **41-1114**
- Field measurements of the adhesion strength of ice. Makkonen, L., et al., [1986, p.725-734, eng] **41-1128**
- Ice adhesion to structural materials. Kozlovskaya, R.T., et al., [1982, p.96-101, rus] **41-1274**
- Tribotechnical properties of fluoroplastic-4 and super-high molecular polyethylene in contact with ice and snow. Egorov, E.N., et al., [1984, p.8-10, rus] **41-4505**
- Adhesion of ice-snow masses to moving ships. Voevodin, V.A., [1984, p.17-19, rus] **41-4509**
- Ice age**
- See: Pleistocene
- Ice age theory**
- Paleoglacial traces and series of multiglaciation in the Luojishan Mountain. Cui, Z., et al., [1986, p.107-118, chi] **41-1458**
- Floating ice shelves related to ice age climates. Denton, G.H., et al., [1986, p.509-513, eng] **41-2801**
- Model of the ice age cycle. Hyde, W.T., et al., [1987, p.1351-1374, eng] **41-4053**
- Ice air interface**
- Wind regime over Golubini glacier during the ablation period. Kurochkin, I.U.N., [1986, p.170-174, rus] **41-129**
- Some relationship between antarctic ice extent and climate. Peng, G., et al., [1983, p.303-309, chi] **41-673**
- Ice air interaction theory for migration of marginal ice zone. Chu, P.C., [1986, p.863-883, eng] **41-869**

- Large-scale short-period sea ice atmosphere interaction. Cahalan, R.F., et al., [1986, p.10,709-10,717, eng] **41-1010**
- Regularities governing glacier fluctuations in the Eurasian Arctic. Kislov, A.V., et al., [1986, p.120-125, 236-241, eng] **41-1066**
- Boundary layer studies at Terra Nova Bay. Bromwich, D.H., [1986, p.13-16, eng] **41-1073**
- Atmospheric boundary layer modification in the marginal ice zone. Bennett, T.J., Jr., et al., [1986, p.13,033-13,044, eng] **41-1861**
- Convective heat- and mass transfer between artificial ice and the atmosphere. Likhtenshtein, E.L., [1986, p.10-16, rus] **41-2147**
- Theory for scalar roughness and transfer coefficients over snow and ice. Andreas, E.L., [1987, p.159-184, eng] **41-2364**
- Geophysics of sea ice. [1986, 1196p., eng] **41-2985**
- Atmospheric boundary layer. McBean, G., [1986, p.283-337, eng] **41-2989**
- Arctic stratus clouds. Herman, G.F., [1986, p.465-488, eng] **41-2992**
- Atmospheric modelling and air-sea-ice interaction. Herman, G.F., [1986, p.713-754, eng] **41-2997**
- Diagnostic studies of large-scale air-sea-ice interactions. Walsh, J.E., [1986, p.755-784, eng] **41-2998**
- Stochastic description of atmosphere-sea ice-ocean interaction. Lemke, P., [1986, p.785-823, eng] **41-2999**
- Aspects of the meteorology of the seasonal sea ice zone. Barry, R.G., [1986, p.993-1020, eng] **41-3001**
- Ice/air feedback mechanism for the migration of the marginal ice zone. Chu, P.C., [1986, p.54-64, eng] **41-3059**
- Air-ice-ocean coupled model for the formation of leads or polynyas. Chu, P.C., [1986, p.79-88, eng] **41-3061**
- Comment on "Atmospheric boundary layer modification in the marginal ice zone" by T.J. Bennett, Jr. and K. Hunkins. Andreas, E.L., [1987, p.3965-3969, eng] **41-3064**
- Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship. Makshtas, A.P., et al., [1986, p.139-145, eng] **41-3265**
- Meso- and macroscale air-sea interaction processes in the South Atlantic Ocean. Vasil'ev, V.F., et al., [1986, p.62-67, rus] **41-4188**
- Small-scale interaction between atmosphere and ocean at Maud Rise. Makshtas, A.P., et al., [1986, p.67-71, rus] **41-4189**
- Ice process development. Romanov, A.A., [1986, p.28-35, rus] **41-4193**
- Summer marginal sea ice zone experiments in the Fram Strait and Greenland Sea. Johannessen, O.M., [1987, p.6716-6718, eng] **41-4231**
- Surface stress, heat flux and drag coefficient in the ice edge zone, 1983. Fairall, C.W., et al., [1987, p.6921-6932, eng] **41-4248**
- Instability theory of ice-air interaction for the formation of ice edge bands. Chu, P.C., [1987, p.6966-6970, eng] **41-4252**
- Interaction between subtropical high and polar ice in Northern Hemisphere. Fang, Z., [1987, p.330-335, eng] **41-4487**
- Role of local heat sources in synoptic activity within the Polar Basin. LeDrew, E.F., [1984, p.309-327, eng] **41-4534**
- Ice bearing capacity**
- See: Ice cover strength
- Ice blasting**
- Ice destruction. Methods and technology. Bogorodskii, V.V., et al., [1986, 214p., eng] **41-2564**
- Ice blasting. Tavrizov, V.M., [1986, 136p., rus] **41-2646**
- Blasting and blast effects in cold regions. Part 2: underwater explosions. Mellor, M., [1986, 56p., eng] **41-3020**
- Revised guidelines for blasting floating ice. Mellor, M., [1986, 37p., eng] **41-3814**
- Deviation of guidelines for blasting floating ice. Mellor, M., [1987, p.193-206, eng] **41-4495**
- Ice booms**
- Determining the effectiveness of a navigable ice boom. Perham, R.E., [1985, 28p., eng] **41-446**
- Niagara River ice boom: effects on environment. Rumer, R.R., Jr., et al., [1983, p.105-116, eng] **41-3573**
- Ice bottom surface**
- On the spacing and draft distributions for pressure ridge keels. Wadhams, P., et al., [1986, p.10,697-10,708, eng] **41-1009**
- Nutrient limitation of sea ice microalgae. Maestrini, S.Y., et al., [1986, p.969-982, eng] **41-1473**
- Under-ice topography in the Arctic basin. McLaren, A.S., [1986, 163p., eng] **41-1932**
- Effect of sub-surface irregularities on the strength of multi-year ice. Hallam, S.D., et al., [1987, p.225-238, eng] **41-2426**
- Under-ice topography of the Arctic Basin. McLaren, A.S., [1986, p.165-191, eng] **41-2658**
- Ice cover thickness measurements in the Arctic Ocean. McLaren, A.S., et al., [1986, p.225-235, eng] **41-2661**

- Analysis of acoustical features of laboratory grown sea ice. Stanton, T.K., et al, [1986, p.1486-1494, eng] 41-3068
- West Antarctic Ice Sheet: the need to understand its dynamics. Van der Veen, C.J., [1987, p.1-16, eng] 41-3272
- Ice breaking**
- Wärtsilä Arctic Pusher System. Segercrantz, H., [1986, p.26-28, eng] 41-89
- Note on ice scaling. Jones, N., [1986, p.134-135, eng] 41-259
- Arctic runs of the Balti. Kotliarskii, M., [1986, p.12-13, rus] 41-435
- M.V. Arctic-spring 1986 performance trials voyage report. Peirce, T.H., et al, [1986, 30p., eng] 41-695
- Global response of icebreakers ramming heavy ice. Vaughan, H., [1986, p.279-286, eng] 41-876
- Coast Guard's new polar icebreaker. Williams, B., [1986, p.473-482, eng] 41-951
- Some latest developments in icebreaker technology. Schwarz, J., [1986, p.161-167, eng] 41-977
- Model test of an ice class bulk carrier with the Thyssen/Waas bow form. Freitas, A., et al, [1986, p.168-172, eng] 41-978
- Ice management for year-round operating marine terminals. Tsinker, G.P., [1986, p.409-435, eng] 41-1110
- Icebreaking tanker transit simulation model. Kämäräinen, J., [1986, p.1138-1159, eng] 41-1150
- Tugboat-barge equipped for ice navigation. [1985, p.80-81, rus] 41-1520
- Nestship vessels feel at home in ice conditions. [1985, p.120-121, rus] 41-1524
- Ice-breaking ships and operational loads. Vaughan, H., [1986, p.313-322, eng] 41-1601
- U.S. Coast Guard replacement polar icebreaker. Williams, R.E., [1986, p.365-388, eng] 41-1605
- Development of an ice piloting handbook. Brigham, L.W., [1986, p.447-456, eng] 41-1611
- SS ACV icebreaking LNG/oil tanker for year round Arctic transportation. Murthy, T.K.S., [1986, p.563-576, eng] 41-1619
- Ice disaggregation system. Morgan, G.W., [1982, 8 col., eng] 41-1676
- Means for increasing the efficiency of an ice disaggregation system. Morgan, G.W., [1983, 8 col., eng] 41-1677
- Local and global strength aspects for icebreaking ships. Ghoneim, G.A.M., [1986, p.105-148, eng] 41-2025
- Future icebreaker design. Johansson, B.M., et al, [1986, p.169-200, eng] 41-2027
- Advances in icebreaker technology in West Germany. Schwarz, J., [1986, p.201-219, eng] 41-2028
- Operations with icebreaking cargo vessels on the Northern Sea Route. Mikhailichenko, V., [1986, p.792-804, eng] 41-2058
- Big HSWA-ice-tank two years in service now. Schwarz, J., et al, [1986, p.1487-1491, ger] 41-2194
- Vessel transit through ridged ice. Lee, J., et al, [1987, p.307-312, eng] 41-2437
- Ice destruction. Methods and technology. Bogorodskii, V.V., et al, [1986, 214p., eng] 41-2564
- Research and development looking hard at ice-going propulsion and passenger ships [1986, p.7-8, eng] 41-2964
- New icebreaking bow makes debut. [1986, p.17-18, eng] 41-2977
- Winter navigation—a Finnish specialty. Varsta, P., [1985, p.10-13, rus] 41-3084
- Bibliography of icebreakers and ice breaking. [1984, 129p., eng] 41-3230
- Ice thickness data, winter 1979-1980. [1987, 43p., eng] 41-3253
- Sea-ice physical properties and ice navigation. Bjerkelund, C., et al, [1986, 89p. + appends., eng] 41-3363
- Noise and vibration of motorships in thin ice cover. Zinchenko, V.I., et al, [1986, p.48-63, rus] 41-3390
- To change the tactics of ship pilotage in ice. Leskov, M., [1987, p.30-31, rus] 41-3613
- JARE-25 oceanographic and marine biological data, Feb. 1984-Jan. 1985. Matsuda, O., et al, [1987, 211p., eng] 41-3667
- Ice-sheet failure against inclined and conical surfaces. Kaldjian, M.J., [1987, p.145-152, eng] 41-4176
- Adhesion of ice-snow masses to moving ships. Voevodin, V.A., [1984, p.17-19, rus] 41-4509
- See also: Ice cutting; Icebreakers
- Ice breakup**
- Role of ground frost, snow cover, ice break-up and flooding in the fluvial processes of the Oulanka River, NE Finland. Koutaniemi, L., [1984, p.127-161, eng] 41-265
- Sea ice breakup and tidal flats processes, Frobisher Bay, Baffin Island. McCann, S.B., et al, [1986, p.168-180, eng] 41-362
- River ice conditions in Finland. Maunula, M., [1986, p.45-54, eng] 41-537
- Numerical modeling of river ice conditions in Finland. Reiter, P.H., et al, [1986, p.305-317, eng] 41-539
- Antarctic iceberg distribution and dissolution. Hamley, T.C., et al, [1986, p.242-251, eng] 41-685
- Ice balance of Lake Bayk. [1982, 1p., rus] 41-1277
- Moskalets, V.F., [1982, 1p., rus] 41-1277
- Mechanism of ice breakup. [1982, p.70-72, eng] 41-1442
- Sea ice measurements at Davis Station. Zhang, Q., [1986, p.143-148, chj] 41-1461
- Hudson River ice management. Ferrick, M.G., et al, [1985, p.96-110, eng] 41-1488
- Recommendations for site-specific observations of river ice. Prowse, T.D., [1985, p.111-125, eng] 41-1489
- Hydrothermal decay of ice jams. Prowse, T.D., et al, [1985, p.272-276, eng] 41-1504
- HF radar observations of Arctic pack-ice breakup. Lipa, B.J., et al, [1986, p.270-275, eng] 41-1509
- Dynamic ship/ice impact—results of parametric model testing. Daley, C.G., et al, [1986, p.349-363, eng] 41-1604
- New direction in the Arctic ice navigation research. Buznev, A.I.A., et al, [1986, p.176-178, rus] 41-1665
- Forecasting ice breakup dates for Siberian rivers. Liser, I.I.A., [1986, p.42-60, rus] 41-1965
- Ice jam characteristics, Liard-Mackenzie rivers confluence. Prowse, T.D., [1986, p.653-665, eng] 41-2476
- Ice dynamics in the Weddell Sea, 1980. Golosov, V.V., [1986, p.103-108, rus] 41-2723
- Ice regimes of the lower Mackenzie River and Mackenzie Delta. Terroux, A.C.D., et al, [1981, 64p. + append., eng] 41-2727
- Allowing for stream and ice dynamics when calculating ice breakup on concentrated overfalls. Fomichev, B.S., [1986, p.83-87, rus] 41-2755
- Role of standing waves in dynamics of Weddell Sea ice sheet. Seidov, D.G., et al, [1986, p.90-93, eng] 41-3681
- Date of break-up of lake ice as a climate index. Ruosteenoja, K., [1986, p.89-99, eng] 41-3758
- Breakup of small rivers in the Subarctic. Woo, M.-K., et al, [1987, p.784-795, eng] 41-4081
- Studies of natural conditions and prospects for their application. Matveev, N.P., ed, [1985, 118p., rus] 41-4560
- Ice rafting of clastic material. Borsuk, O.A., [1985, p.51-54, rus] 41-4561
- Ice thickness data for selected Canadian stations, 1972-1976 winters. [1976, 4 pieces, eng] 41-4595
- Ice bridges**
- See: Ice crossings
- Ice caps**
- See: Ice sheets
- Ice caves**
- Ice cave on Mont Blanc, France, 1986. Reynaud, L., [1987, p.130-131, eng] 41-3606
- Ice composition**
- Using stable isotopes in studying ground ice. Kritsuk, L.N., et al, [1986, p.92-97, rus] 41-112
- Tritium content in different types of ice. Romanov, V.V., et al, [1986, p.98-100, rus] 41-113
- Seasonal variation of chlorophyll-a in fast ice near Davis Station. Lu, P., [1986, p.11-19, chj] 41-397
- Identification of phytoplankton pigments in waters near Davis Station. Li, B., et al, [1986, p.110-115, chj] 41-403
- Use of deuterium to trace the origin of drifting sea ice. Arnason, B., [1985, p.85-89, eng] 41-591
- Chemical effects of sea water on sea ice melt water. Anderson, L.G., et al, [1985, p.90-96, eng] 41-592
- Stable isotope stratigraphy of ice cores and the age of the last eruption at Mount Melbourne, Antarctica. Lyon, G.L., [1986, p.135-138, eng] 41-610
- Ross Ice Shelf oxygen isotopes and west antarctic climate history. Grootes, P.M., et al, [1986, p.49-67, eng] 41-612
- Arctic ice shelf growth, fiord oceanography and climate. Jeffries, M.O., et al, [1984, p.147-153, eng] 41-631
- Atmospheric toxic metals in snow and ice. Boutron, C.F., [1986, p.467-505, eng] 41-672
- Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples. Kerimov, A.M., et al, [1985, p.71-78, rus] 41-846
- Preliminary measurements of SO<sub>2</sub> adsorbed on ice. Sommerfeld, R.A., et al, [1986, p.349-351, eng] 41-865
- Changes in precipitation chemistry at Dye-3, Greenland. Finkel, R.C., et al, [1986, p.9849-9855, eng] 41-1021
- Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al, [1986, p.175-196, eng] 41-1095
- Reinforced ice as a construction material—creep of reinforced ice beams. Grabe, G., [1986, p.793-806, eng] 41-1133
- Effect of brine on sea ice heat conductivity. Nazintsev, I.U., [1986, p.107-115, rus] 41-1266
- Lead concentration changes in antarctic ice during the Wisconsin/Holocene transition. Boutron, C.F., et al, [1986, p.222-225, eng] 41-1630
- Influence of glacier water on the formation of the chemical composition of mountain river water. Gachechiladze, G.A., [1986, p.78-82, eng] 41-1692
- Partial phase diagram for the system NH<sub>3</sub>-H<sub>2</sub>O: the water-rich region. Johnson, M.L., et al, [1985, p.39-47, eng] 41-1695
- Formation history and environment of cometary nuclei. Yamamoto, T., [1985, p.205-219, eng] 41-1706
- Cometary ices. Delsemme, A.H., [1985, p.505-517, eng] 41-1721
- Composition and structure of planetary rings. Burns, J.A., [1985, p.655-679, eng] 41-1729
- Sulfur dioxide ice on Io. Cruikshank, D.P., et al, [1985, p.805-815, eng] 41-1739
- Methane ice on Triton and Pluto. Cruikshank, D.P., et al, [1985, p.817-827, eng] 41-1740
- Long-term record of H<sub>2</sub>O<sub>2</sub> in polar ice cores. Neftel, A., et al, [1986, p.262-270, eng] 41-1756
- Study of tabular ground ice bodies from the Ledyanaya Gora section in the Yenisey valley using the oxygen isotope method. Valkmiae, R.A., et al, [1986, p.32-38, eng] 41-1789
- Origin of some buried ice forms in the Yamal tundra. Krass, M.S., et al, [1986, p.66-75, rus] 41-1793
- U.S. Coast Guard Arctic Pollution Response Research and Development. Fitzpatrick, M., [1985, p.863-865, eng] 41-1914
- Chemistry of a temperate pond's decaying winter cover. Kingsbury, C.M., et al, [1984, p.139-142, eng] 41-1954
- Observations of chlorophylls in high arctic sea ice in winter. Roberts, A.T., et al, [1984, p.148-152, eng] 41-1956
- Biogenic and mineral inclusions in a green iceberg from the Weddell Sea. Dieckmann, G., et al, [1987, p.31-33, eng] 41-1975
- Effective age of bubbles in polar ice. Enting, I.G., et al, [1985, p.777-790, eng] 41-2111
- Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core. De Angelis, M., et al, [1987, p.318-321, eng] 41-2505
- On the profile properties of undeformed first-year sea ice. Cox, G.F.N., et al, [1986, p.257-330, eng] 41-2663
- Structure and mechanical properties of artificial ice. Savilev, B.A., et al, [1986, p.169-176, rus] 41-2837
- Two Be-10 peak depositions in ice during last glaciation. Raisbeck, G.M., et al, [1987, p.273-277, eng] 41-2891
- Low temperature effects on organophosphonates. Britton, K.B., [1986, 47 refs., eng] 41-3050
- Crystal structure of Fram Strait sea ice. Gow, A.J., et al, [1986, p.20-29, eng] 41-3056
- Nitrate deposition in Antarctica; temporal and spatial variations. Laird, C.M., [1986, 268p., eng] 41-3155
- Siple ice core data reveals biospheric CO<sub>2</sub> emissions. Siegenthaler, U., et al, [1987, p.140-154, eng] 41-3196
- Major inorganic ions in the North Pole snow samples. Karlsson, V., et al, [1987, p.8-13, eng] 41-3369
- Isotopes in the hydrosphere (Summary of results presented at the 2nd All-Union symposium on isotopes, Podolskiy, May 27-31, 1985). [1985, 259p., rus] 41-3534
- Prospects for using oxygen isotope determinations in paleogeocryological reconstructions. Vasil'chuk, I.U.K., et al, [1985, p.64-65, rus] 41-3535
- Ground ice origin from deuterium and heavy oxygen isotope content. Vasil'chuk, I.U.K., et al, [1985, p.66-68, rus] 41-3536
- Isotope composition of ground ice on the Yamal Peninsula. Kritsuk, L.N., et al, [1985, p.142-143, rus] 41-3537
- Oxygen-isotope composition in the ocean-glacier system. Nikolaev, V.I., et al, [1985, p.172-174, rus] 41-3538
- Description of tabular ground ice outcropping in the Ledyanaya Gora. Vtiurin, B.I., et al, [1986, p.273-285, eng] 41-3618
- Surface chlorophyll a distribution in the marginal ice zone, 1984-1985. Fukuda, Y., et al, [1986, p.24-33, eng] 41-3630
- Oxygen isotope composition of syngenetic ice wedges (analytical data, problems of paleoclimatic reconstruction). Vasil'chuk, I.U.K., et al, [1986, p.107-119, rus] 41-3775
- Polar ice cores. Palais, J.M., [1987, p.55-60, eng] 41-3937
- Seasonal variation in phytoplankton and ice algae in shallow coast site. Perrin, R.A., et al, [1987, p.33-46, eng] 41-4084
- Riiser-Larsen oxygen isotopes and accumulation rates. Orheim, O., et al, [1986, p.33-47, eng] 41-4095
- Basic components of chemical balance of the Arctic Ocean. Rusanov, V.P., [1986, p.40-51, rus] 41-4195
- Ice-core CO<sub>2</sub> data and biotic CO<sub>2</sub> sources. Enting, I.G., et al, [1987, p.318-325, eng] 41-4207
- Chemical fractionation of brine in McMurdo Ice Shelf. Cragin, J.H., et al, [1986, p.307-313, eng] 41-4281
- Grain growth in polar ice: Pts. 1 and 2. Alley, R.B., et al, [1986, p.415-433, eng] 41-4297
- Isotopic fractionation at the base of polar and sub-polar glaciers. Boulton, G.S., et al, [1986, p.475-485, eng] 41-4303
- Rheological properties of ice loaded with microparticles. Fisher, D.A., et al, [1986, p.501-510, eng] 41-4305
- Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP. Boutron, C.F., et al, [1987, p.1197-1202, eng] 41-4603

## Ice conditions

- Arctic offshore—a challenge to the technical sciences. Kostilainen, V., [1986, p.4-7, eng] 41-84
- Research on arctic offshore structures at WARC. Joensuu, A., [1986, p.10-13, eng] 41-86
- Finnlines fleet for year-round transportation. [1986, p.45-47, eng] 41-91
- Influence of atmospheric circulation on sea ice conditions. Aleksandrov, E.I., et al, [1986, p.118-122, rus] 41-118
- Ice on northern seas and wind in equatorial stratosphere. Sheremet'evskaya, O.I., [1986, p.128-131, rus] 41-120
- Sea ice conditions in the Labrador Sea-Grand Banks area. Zakrzewski, W.P., [1986, p.60-87, eng] 41-145
- Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., [1986, p.115-161, eng] 41-147
- Effects of ice cover on tidal currents and freshwater content. Prinsenberg, S.J., [1986, p.298-327, eng] 41-153
- Long-range prediction of iceberg severity in the Labrador Sea. Wittman, W.I., et al, [1986, p.355-385, eng] 41-155
- NOAA AVHRR digital data for sea ice analysis. Ramsay, B.R., et al, [1986, p.495-508, eng] 41-161
- Sea ice concentration and ice edge position using remote sensing. Williams, D.R.P., [1986, p.526-536, eng] 41-163
- Ice conditions, Canadian east coast, using remote sensing data. Walker, A.E., [1986, p.537-545, eng] 41-164
- Side-looking airborne radar detection and identification of icebergs. Edwards, N.C., Jr., et al, [1986, p.546-554, eng] 41-165
- Ice and ice management on the Grand Bank. Ransom, J.A.N., et al, [1986, p.561-582, eng] 41-167
- Ice monitoring and forecasting for the BeauDril Kulluk. Eley, F.J., [1986, p.598-614, eng] 41-171
- Ice cover charts, upper St. Lawrence River, 1971-81. [1986, p.615-621, eng] 41-172
- Ice management on the Grand Banks. Hotzel, I.S., [1985, p.416-419, eng] 41-220
- Deployment and operation of the ice station for the FRAM program. Heiberg, A., et al, [1985, p.420-422, eng] 41-222
- Ice navigation studies in the Alaskan Arctic using OLAR class icebreakers. Brigham, L.W., et al, [1986, p.441-447, eng] 41-225
- Nearshore sediments of eastern Baffin Island. [1986, p.448-450, eng] 41-245
- Sea ice fields in the Barents Sea. Vinje, [1985, p.26p., map, eng] 41-247
- Physical approaches to iceberg severity prediction. Marko, J.R., et al, [1986, p.104p., eng] 41-274
- Icebreakers: fuel economy and safe navigation. Bereznii, V., [1986, p.35-36, rus] 41-436
- Ice problems associated with rivers and reservoirs. Benson, C., et al, [1986, p.70-98, eng] 41-475
- Compendium of Arctic environmental information. Welsh, J.P., et al, [1986, p.142p., eng] 41-483
- Field measurements under winter conditions. [1986, p.323p., eng] 41-533
- Some practical aspects of global ice reduction. Hyvarinen, V., [1986, p.25-27, eng] 41-534
- River ice conditions in Finland. Maunula, M., [1986, p.45-54, eng] 41-537
- Numerical modeling of river ice conditions in Finland. Reiter, P.H., et al, [1986, p.305-317, eng] 41-539
- Ice conditions and offshore structures. [1986, p.31-32, eng] 41-568
- Snow and ice. Morris, E.M., [1985, p.153-182, eng] 41-648
- Geologic report for the Beaufort Sea planning area, Alaska. Craig, J.D., et al, [1985, p.165-173, eng] 41-694
- Interpreting satellite scanning images of medium resolution for studying ice conditions in the Baltic Sea. Drabkin, V.V., [1986, p.223-227, rus] 41-707
- Glacial deposition including moraines, drumlins and eskers. Minion, R., comp, [1985, 98p., eng] 41-825
- Microwave observations of sea ice in the Bering and Greenland Seas. Grenfell, T.C., [1986, p.378-382, eng] 41-834
- Analysis of extreme ice loads measured on USCGC Polar Sea. Daley, C.G., et al, [1984, p.241-252, eng] 41-874
- Arctic environment. Reshew, J.W., [1986, p.83-100, eng] 41-926
- Coast Guard helicopter operations in polar regions. Wendt, P.A., [1986, p.165-173, eng] 41-930
- Ship operations in high latitudes. Lecourt, E.J., Jr., et al, [1986, p.175-182, eng] 41-931
- LAMPS MK III environmental capabilities. Olmstead, J., [1986, p.185-200, eng] 41-932
- NAWS—a hull stress monitoring system for arctic ships. Kendrick, A., et al, [1986, p.407-419, eng] 41-943
- Proceedings. [1986, 210p., eng] 41-966
- Northern technical research at the University of Oulu. Ukkola, A., [1986, p.113-118, eng] 41-968
- Canadian sea ice information system CSIS: an online computer database for sea ice and iceberg data. Whittick, J.A., et al, [1986, p.119-124, eng] 41-969
- Research on engineering in the Arctic and subarctic regions, the Cold Region Technology Center of Luleå University. Lindmark, R., [1986, p.1129, eng] 41-970
- Some latest developments in icebreaker technology. Schwarz, J., [1986, p.1167, eng] 41-977
- Sea ice concentration from AVHRR imagery. Yamanouchi, T., et al, [1986, p.89-102, eng] 41-979
- Water masses and circulation of the southern ocean. Sarukhanian, E.I., [1986, 288p., rus] 41-1013
- Regularities governing glacier fluctuations in the Eurasian Arctic. Kislov, [1986, p.120-125, 236-241, eng] 41-1066
- Unsteady flow simulation for an ice-covered river. Yapa, P.D., et al, [1986, p.1037-1049, eng] 41-1086
- Ice engineering—search activities on the Japanese coast of Okhotsk. Oshima, M., [1986, p.15-29, eng] 41-1088
- Ice information systems for marine operations. Leppanen, M., [1986, p.57-70, eng] 41-1090
- Integrated monitoring system for Arctic offshore drilling. Leavitt, E., et al, [1986, p.107-118, eng] 41-1093
- Ice management techniques in ice infested waters. [1986, p.323-339, eng] 41-1104
- Controlled Production and Storage System (COMPASS) in ice-infested waters. Pass, H., [1986, p.633-659, eng] 41-1122
- New materials for sub-arctic and arctic offshore structures. [1986, p.833-968, eng] 41-1135
- Rash ice effects on ship operations. Forsman, B., et al, [1986, p.1021-1038, eng] 41-1144
- Operational experience with the new-type Baltic icebreaker "Otso". Jansson, J.-E., et al, [1986, p.1039-1060, eng] 41-1145
- Hydrodynamic loads during ice-clogging of a propeller. Lindroos, H., et al, [1986, p.1061-1092, eng] 41-1146
- Icebreaking tanker transit simulation model. Kämäräinen, J., [1986, p.1138-1159, eng] 41-1150
- Transportation of heavy modules to the Arctic. Kirkeide, K.L., et al, [1986, p.1160-1168, eng] 41-1151
- Ice loads on offshore structures: the transition from creep fracture. Sanderson T.J.O., et al, [1986, p.157-151, eng] 41-1286
- Offshore outlook: the American Arctic. Jahns, H.O., [1985, p.76-82, eng] 41-1328
- Allocating for physiographic factors in estimating maximum river runoff for the swampy forest zone of Priuryshe. Trofimova, E.V., [1986, p.143-147, rus] 41-1372
- Regularities governing the formation of river water resources in the Arctic. [1986, p.131-139, rus] 41-1374
- Peculiarities of water balance structure in different landscapes of Priangara. Berkin, N.S., et al, [1986, p.187-193, rus] 41-1375
- Hudson River ice management. Ferrick, M.G., et al, [1985, p.96-110, eng] 41-1488
- Year-round shipping routes in the Canadian Arctic. Dey, B., [1985, p.237-242, eng] 41-1499
- Using satellite data for calculating ocean-atmosphere heat transfer in the Newfoundland energy-active oceanic zone in winter. Rzhaplinskii, D.G., et al, [1986, p.32-41, rus] 41-1540
- Oceanographic cruise to the Greenland Sea, Sep. 1985. Bourke, R.H., et al, [1986, 32p., eng] 41-1547
- Research for commercial Arctic marine transportation. Seibold, F., [1985, p.28-35, eng] 41-1557
- Great Lakes climatological atlas. Sauleleja, A., ed, [1986, 145p., eng] 41-1577
- Sea ice pressure ridges. Bishop, G.C., et al, [1986, p.157-184, eng] 41-1591
- Problems in physical modeling of the propulsion and maneuvering of ice transiting ships. Kostilainen, V., [1986, p.323-331, eng] 41-1602
- Development of an ice piloting handbook. Brigham, L.W., [1986, p.447-450, eng] 41-1611
- "NAV-ICE"—an integrated system for ice navigation. McAvoy, J.G., et al, [1986, p.457-466, eng] 41-1612
- Ship motion in waterways clogged with broken ice. Bratanov, T., et al, [1986, p.503-571, eng] 41-1615
- Progress in developing new design guidelines for ice transiting ships. Seibold, F., et al, [1986, p.537-552, eng] 41-1617
- Operation of ships in the Arctic. Köhler, P.E., et al, [1986, p.553-2, eng] 41-1618
- Active and passive remote sensing of ice. Kong, J.A., [1984, 14p., figs., eng] 41-1763
- Drilling fluid and cuttings discharges in Alaska. Houghton, J.P., et al, [1984, p.1-388, eng] 41-1782
- Long-range forecasting of Grand Banks iceberg severity. Davids, L.W., et al, [1986, 163p., eng] 41-1835
- Spatial variability of lake ice covers. Bengtsson, L., [1986, p.113-121, eng] 41-1848
- Statistics for various U.S. terrain and water (ice) bedlands. La Rocca, A.J., et al, [1980, 785p., eng] 41-1853
- Artificial islands: a distinct alternative. Zadikoff, G., [1986, p.1056-1061, eng] 41-1915
- Multi-year experience of remote sensing of ice thickness in the St. Lawrence River. Batson, G., et al, [1984, p.6-100, eng] 41-1950
- Long-range forecasting of ice conditions on rivers. [1986, p.71-81, rus] 41-1966
- Method and means for increasing the maneuverability of a ship in ice-covered waters. Lord, S.M., et al, [1983, 12 col., eng] 41-1981
- International Polar Transportation Conference, 1986. [1986, 2 vols. (877p.), eng] 41-2020
- Canada's Arctic marine transportation research programs. Brenckmann, M., [1986, p.1-18, eng] 41-2021
- Polar class icebreakers. Rinehart, V., et al, [1986, p.19-40, eng] 41-2022
- Drilling rig transportation in the Canadian arctic islands. Baudais, D.J., et al, [1986, p.420-451, eng] 41-2038
- Aircraft support of research in Antarctica. Bresnahan, D.M., [1986, p.473-494, eng] 41-2040
- Experiences with High Arctic offstrip aircraft operations. Doyle, P., [1986, p.495-511, eng] 41-2041
- Operating experiences with the Polarstern in Antarctica. Suhrmeyer, L., et al, [1986, p.548-562, eng] 41-2045
- Operating of the Antarctic icebreaker Shirase and traverse by snow vehicle. Ishizawa, K., [1986, p.563-578, eng] 41-2046
- AP-188 hovercraft in ice operations. Rosquist, K., [1986, p.590-601, eng] 41-2047
- Winter navigation of icebreaking Lunda-class tankers in the Baltic Sea. Tomblom, A., [1986, p.710-725, eng] 41-2053
- Experiences from bulk transports in the Arctic. Ekholm, S., [1986, p.726-733, eng] 41-2054
- Safe speed of ships in Arctic waters. Koehler, P.E., et al, [1986, p.734-746, eng] 41-2055
- Winter marine transportation off Alaska. Brigham, L.W., [1986, p.805-819, eng] 41-2059
- Safe shipping routes in Canadian Arctic waters. MacPhee, S., et al, [1986, p.820-838, eng] 41-2060
- Advanced radar systems for support of Arctic marine operations. Mercer, J.B., et al, [1986, p.839-858, eng] 41-2061
- Merchant ship ice navigation studies in the Canadian Arctic. [1986, p.859-877, eng] 41-2062
- Drilling offshore western Greenland—ice. Hammett, D.S., et al, [1978, p.119-128, eng] 41-2122
- Behavior of the downward flow of oil spill in the ice-covered waters of Buzzards Bay. Deslauriers, P.C., et al, [1978, p.267-276, eng] 41-2124
- Modification of polar ice forecast subsystem—Arctic. [1986, p.2191, eng] 41-2191
- River ice jams: theory, case studies, and applications. Gerard, R., [1987, p.241-255, eng] 41-2243
- Arctic R & D—a niche for Finland. Jauho, P., [1986, p.21-24, eng] 41-2265
- Development of Canadian frontier regions. Pallister, A.E., et al, [1986, p.36-63, eng] 41-2265
- Hydrocarbons and future exploitation in Norwegian and Barents Seas. Bergsager, E., [1986, p.64-93, eng] 41-2266
- Development of hydrocarbon resources in ice-covered areas: an overview. Gulmizarov, V., [1986, p.111-123, eng] 41-2268
- United States offshore developments in the Bering and Beaufort Seas. Kelly, P.L., [1986, p.124-148, eng] 41-2269
- Future of sub-arctic and arctic offshore development in Canada. Matheson, J.R., [1986, p.149-159, eng] 41-2270
- Offshore oil and gas production structures in freezing conditions. Issangulov, K.I., et al, [1986, p.160-166, eng] 41-2271
- Ice surveillance by satellite. Thompson, T., [1986, p.179-186, eng] 41-2273
- Ice data management for support of offshore operations. Terry, B.F., et al, [1986, p.195-222, eng] 41-2275
- Experimental study of maneuverability of icebreakers and ships in sea ice. Ionov, B.P., et al, [1986, p.276-297, eng] 41-2279
- Tomorrow's technology in sub-Arctic and Arctic hydrocarbon exploration. Adams, P.F., [1986, p.312-316, eng] 41-2281
- General viewpoints on hydrocarbon developments in northern regions. Howard, M.W., [1986, p.317-323, eng] 41-2282
- Users manual for a polar ice forecast subsystem—Arctic. [1986, 18p., eng] 41-2328
- Ice loads on icebreaker Sisu in 1979-85. Kujala, P., et al, [1986, 52p. + append., eng] 41-2336
- Antarctic ice charts 1983-1984. [1985, 125p., eng] 41-2337
- Ice alert levels for Arctic operations. Dunwoody, A.B., [1987, p.41-46, eng] 41-2400
- Ice impacts on semisubmersibles. Lindberg, K., et al, [1987, p.313-320, eng] 41-2438
- Some statistical issues in the analysis of global ice loads. Salvaggio, M.A., et al, [1987, p.357-364, eng] 41-2443
- Forecasting summer ice conditions in the Beaufort Sea. Pritchard, R.S., et al, [1987, p.371-377, eng] 41-2445
- Probabilistic analysis of sea ice in North Bohai Bay. Liu, T., et al, [1987, p.387-391, eng] 41-2447
- Sea ice off the Icelandic coasts, Oct. 1985-Sep. 1986. [1986, 32p., ice] 41-2490
- Caisson wellheads allow for future use of offshore exploration wells. McIntosh, I., et al, [1987, p.2571, eng] 41-2571



- Ice cover. Markham, W.E., [1986, p.101-116, eng] 41-2593
- Forecasting the freezeup date of the Danube River. Shcherbak, A.V., [1986, p.155-160, rus] 41-2636
- Forecasting ice thickness and concentration in the Arctic. Preller, R.H., et al, [1986, p.155-164, eng] 41-2657
- Sea ice forecasting. Benner, D.A., [1986, p.193-206, eng] 41-2659
- Prediction of the occurrence of thin ice features. Farmer, L.D., et al, [1986, p.207-223, eng] 41-2660
- Ecological effects of canal diversion on Hudson and James Bays. Milko, R., [1986, p.316-326, eng] 41-2690
- Calculating meteorological elements over the Okhotsk Sea. Petrov, A.G., [1986, p.3-9, rus] 41-2721
- Ice regimes of the lower Mackenzie River and Mackenzie Delta. Terroux, A.C.D., et al, [1981, 64p. + append., eng] 41-2727
- Geophysics of sea ice: overview. Untersteiner, N., [1986, p.1-8, eng] 41-2986
- Atmospheric modelling and air-sea-ice interaction. Herman, G.F., [1986, p.713-754, eng] 41-2997
- Aspects of the meteorology of the seasonal sea ice zone. Barry, R.G., [1986, p.993-1020, eng] 41-3001
- Remote sensing as a research tool. Carsey, F.D., et al, [1986, p.1021-1098, eng] 41-3002
- Sea ice data base. Barry, R.G., [1986, p.1099-1134, eng] 41-3003
- Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program. Hodgins, D.O., et al, [1986, 195p., eng] 41-3030
- Oil spills in pack ice. [1987, 95p. + append., eng] 41-3074
- In situ burning of oil in experimental ice leads. Brown, H.M., et al, [1987, 27p., eng] 41-3075
- Ice scoring in the Canadian Beaufort Sea. McGonigal, D., et al, [1986, p.51-59, eng] 41-3091
- Wave growth in scattered sea-ice. Masson, D., et al, [1987, p.257-266, eng] 41-3167
- Geotechnical design for an arctic mobile offshore drilling unit. Hewitt, K.J., et al, [1986, p.956-979, eng] 41-3170
- Marine processes. Baker, J.M., et al, [1987, p.50-74, eng] 41-3233
- Results of modeling high latitude climates. Nagurnyi, A.P., [1986, p.21-32, eng] 41-3263
- Spaceborne SAR and sea ice: a status report. Weeks, W.F., [1983, p.113-115, eng] 41-3347
- Engineering mechanics—6th conference. Abstracts. [1987, 336p., eng] 41-3352
- Ice-engineering: research after the rush. Ettema, R., et al, [1987, p.(A)22-(A)33, eng] 41-3353
- Ice conditions at Issungnak, 1978-79. Shinde, S.B., [1981, 25p. + append., eng] 41-3361
- Ergonomic evaluation of STAR-VUE and NAV-ICE. McAvoy, G., et al, [1986, 130p. + append., eng] 41-3365
- Manoeuvring tests in ice aboard USCGC Polar Star in Antarctica, 1985. Menon, B., et al, [1986, 44p. + append., eng] 41-3373
- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed, [1986, 120p., rus] 41-3385
- On the use of lake ice conditions to monitor climatic change. Anderson, J.C., [1987, 28p. + append., eng] 41-3424
- Water resources of the Yakut ASSR and their use. Nogovitsyn, D.D., [1985, 124p., rus] 41-3432
- Rubble field study, Issungnak, 1979-80. Vol. I. Executive summary report. McGonigal, D., [1983, 38p., eng] 41-3549
- Pack ice/rubble field interaction study, Issungnak 1980. [1981, 88p. + append., eng] 41-3550
- Ice conditions around Issungnak, 1979-80. Data report. Shinde, S.B., [1981, 58p. + figs., append., eng] 41-3551
- Issungnak rubble pile—field installation of ice stress panels—interim report. Vaudrey, K.D., [1980, 13p. + append., eng] 41-3552
- Ice stress panel results, Issungnak 1980. McGonigal, D., [1981, 14p. + figs., eng] 41-3553
- Ice coring and testing, Issungnak 1980—results of NRC's data collection. Frederking, R., [1981, 5p. + figs., eng] 41-3554
- Sea ice in the 1985/86 winter on the coast between Ems and Trave Rivers. Koslowski, G., [1986, p.207-215, ger] 41-3558
- Tidal power plants. Bernshtein, L.B., et al, [1987, 296p. (Pertinent p.239-273), rus] 41-3675
- Polynuclear hydrocarbon concentrations from oil spilled in seawater. Ventajas, L., [1986, 15p., spa] 41-3999
- Seismic survey of the Arctic island channels using open water leads. Sonnichsen, G.V., et al, [1987, p.877-882, eng] 41-4015
- Ice/frost detection using millimeter wave radiometry. Final report for period 28 May 1980-31 August 1981. Gagliano, J.A., et al, [1981, 55p., eng] 41-4155
- Ice distribution in Arctic seas of the North American shelf. Smirnov, V.I., [1986, p.35-40, rus] 41-4194
- Modeling ice cover evolution and ice redistribution. Appel, I.L., et al, [1986, p.71-77, rus] 41-4198
- Mathematical model for river ice. Shen, H.T., et al, [1987, p.141-146, eng] 41-4221
- Ice concentration in the marginal ice zone, Fram Strait. Burns, B.A., et al, [1987, p.6843-6856, eng] 41-4242
- Effect of ice conditions on the drag coefficient in the Greenland Sea ice edge zone. Guest, P.S., et al, [1987, p.6943-6954, eng] 41-4250
- Boundary layer, upper ocean, and ice observations in the Greenland Sea marginal ice zone. Morison, J.H., et al, [1987, p.6987-7011, eng] 41-4255
- Ice conditions of an arctic polynya: North Water in winter. Steffen, K., [1986, p.383-390, eng] 41-4293
- Oceanographic influences on the sea ice cover in the Sea of Okhotsk. Gratz, A.J., et al, [1981, 18p., eng] 41-4327
- Sea ice variations in the Northern Hemisphere, 1974. Parkinson, C.L., et al, [1987, p.119-126, eng] 41-4446
- Oil motion during lead closure. MacNeill, M.R., et al, [1987, 13p., eng] 41-4529
- Ice rafting of clastic material. Borsuk, O.A., [1985, p.51-54, rus] 41-4561
- See also: Sea ice distribution
- Ice (construction material)
- Strength of the natural and artificial river-water ice. Deriugin, A.G., et al, [1986, p.219-222, rus] 41-138
- Optimization of layer-by-layer artificial build-up of ice. Latalin, D.A., [1986, p.222-225, rus] 41-139
- Book review. G.I. Smorygin. Theoretical basis for obtaining loose-structure ice. Sosnovskii, A.V., [1986, p.231-234, rus] 41-141
- Trial construction of 20-m span ice dome. Kokawa, T., et al, [1986, p.67-73, jpn] 41-439
- Construction of temporary winter roads and ice crossings. Titava, G.A., et al, [1986, p.13-14, rus] 41-914
- Reinforced ice as a construction material—creep of reinforced ice beams. Grabe, G., [1986, p.793-806, eng] 41-1133
- Prospects for utilizing snow-ice resources. Kotliakov, V.M., et al, [1986, p.140-144, rus] 41-1656
- Method of selective underground mining and stabilization of rock cavities. Hoberstorfer, G., et al, [1983, 18 col., eng] 41-1773
- Role of Soviet academicians during WW2. Kotliakov, V.M., et al, [1986, p.19-25, rus] 41-1819
- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., [1986, p.92-94, rus] 41-2161
- Strength of granular ice. Deriugin, A.G., et al, [1986, p.129-134, rus] 41-2165
- Strength of reinforced-ice materials. Deriugin, A.G., et al, [1986, p.135-139, rus] 41-2166
- Broadening the use of ice and snow in construction. Volkovskii, K.F., [1986, p.159-162, rus] 41-2170
- Marine ice foundations for drilling rigs fixed at the bottom. Bogorodskii, V.V., et al, [1986, p.162-166, rus] 41-2171
- Accumulation and preservation of massive artificial sea ice. Kamenskii, R.M., et al, [1986, p.167-172, rus] 41-2172
- Experience in ice dam construction. Vdovin, I.U.I., et al, [1986, p.177-183, rus] 41-2174
- Project of the experimental Yamberg ice-core dam. Danielian, I.U.S., et al, [1986, p.183-189, rus] 41-2175
- Determining optimal parameters of thermal protection for dredging grounds. Rashkin, A.V., et al, [1986, p.214-217, rus] 41-2181
- Properties of salt water ice as material for artificial islands construction. Mirzoev, D.A., et al, [1986, p.187-194, eng] 41-2274
- Applications of spray ice and rubble ice for Arctic offshore exploration. Goff, R.D., et al, [1987, p.1-7, eng] 41-2395
- Temperature regime of artificial ice-bearing earth structures. Savilev, B.A., et al, [1986, p.166-168, rus] 41-2836
- Engineering geocryology in hydraulic construction. Bianov, G.F., ed, [1986, 205p., rus] 41-3439
- Prospects and problems of hydraulic power construction in the North. Bianov, G.F., et al, [1986, p.5-12, rus] 41-3440
- Construction of water-raising ice dams. Makarov, V.I., et al, [1986, p.161-171, rus] 41-3439
- Grounded ice island—field and laboratory research. Final report. Duthweiler, F.C., et al, [1976, 26p. + append., eng] 41-3569
- Ice dams for protecting water areas of northern ports. Bogoslovskii, P.A., et al, [1987, p.78-80, rus] 41-3652
- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed, [1986, 81p., rus] 41-4546
- Ice-pillar roof supports in northern mines. Stoliarov, A.M., et al, [1986, p.38-47, rus] 41-4554
- Ice control
- Weather forecasting—a tool for winter snow and ice control on roads. List, C., [1979, 20p., eng] 41-235
- Role of salt in snow and ice control in Ontario. McBride, N., et al, [1979, 68p., eng] 41-236
- Performance of two ice-retardant overlays. Tanski, J.H., [1986, 42p., eng] 41-248
- Winter service on the municipal highways. Sauer, A., [1985, p.37-40, ger] 41-388
- Some practical aspects of graphical ice reduction. Hyvarinen, V., [1986, p.25-29, eng] 41-534
- Ice and river engineering. Starosolszky, O., [1985, p.175-219, eng] 41-902
- Ice management techniques in ice infested waters. Borthwick, I., et al, [1986, p.323-339, eng] 41-1104
- Ice management for year-round operating marine terminals. Tsinker, G.P., [1986, p.409-435, eng] 41-1110
- Field measurements of ice growth suppression by surface insulation. Christensen, F.T., [1986, p.436-446, eng] 41-1111
- Sea spray icing on marine units. Jørgensen, T.S., [1986, p.447-470, eng] 41-1112
- Computer modelling of ice accretion and control of icing on marine units. Løset, S., et al, [1986, p.497-511, eng] 41-1115
- Low adhesion coatings for sea spray icing on offshore structures. Sackinger, W.M., et al, [1986, p.512-527, eng] 41-1116
- Ice-inhibiting additives in road surfacing. Johannes, H., [1981, p.207-219, ger] 41-1548
- Shore based wave generators for ice management at cold region harbours. Andersen, P.F., [1986, p.479-499, eng] 41-1614
- Thunder Bay management program, 1979-1985: overview report. Gillies, T.K., [1986, 86p., eng] 41-2184
- Focus on snow and ice control. [1986, p.30-31, eng] 41-2310
- Road design, allowing for climatic impact on traffic conditions. Vasil'ev, A.P., [1986, 248p., rus] 41-2894
- Determination of surface temperature of anti-iced axial compressor inlet guide vane. Osipov, V.N., [1985, p.56-60, eng] 41-2943
- Optimum sand specifications for roadway ice control. Final report. Connor, B., et al, [1982, 36p., eng] 41-3047
- Experimental study of fluid deicing system. [1983, 152p., eng] 41-3379
- Application of hot sand for winter ice control—laboratory phase. Hayhoe, G.F., [1984, 33p. + append., eng] 41-4073
- Engineering for man-made islands. [1986, p.155-158, eng] 41-4486
- Rotorcraft icing—progress and potential. [1986, 128p., eng] 41-4583
- See also: Ice prevention
- Ice cores
- Ice core drill site at Law Dome summit. Hamley, T.C., et al, [1986, 34p., eng] 41-459
- Stable isotope stratigraphy of ice cores and the age of the last eruption at Mount Melbourne, Antarctica. Lyon, G.L., [1986, p.135-138, eng] 41-610
- Atmospheric toxic metals in snow and ice. Boutron, C.F., [1986, p.467-505, eng] 41-672
- Determination of particle paths using the finite-element method. Stolle, D.F.E., et al, [1986, p.219-223, eng] 41-681
- Flow near an ice divide: analysis problems and data requirements. Waddington, E.D., et al, [1986, p.171-174, eng] 41-763
- Arctic air pollution: an overview of current knowledge. Barrie, L.A., [1986, p.643-663, eng] 41-828
- Organism losses during sea ice melting. Garrison, D.L., et al, [1986, p.237-239, eng] 41-1016
- Changes in precipitation chemistry at Dye-3, Greenland. Finkel, R.C., et al, [1986, p.9849-9855, eng] 41-1021
- Army research could reduce dangers posed by sea ice. Tucker, W.B., [1984, p.20-24, eng] 41-1329
- Recommendations for a U.S. ice coring program. [1986, 67p., eng] 41-1352
- Lead concentration changes in antarctic ice during the Wisconsin/Holocene transition. Boutron, C.F., et al, [1986, p.222-225, eng] 41-1630
- Ice core record of the C-13/C-12 ratio of atmospheric CO<sub>2</sub> in the past two centuries. Friedli, H., et al, [1986, p.237-238, eng] 41-1631
- Microparticles in Dome C ice cores. Gaudichet, A., et al, [1986, p.250-261, eng] 41-1755
- Long-term record of H<sub>2</sub>O<sub>2</sub> in polar ice cores. Neftci, A., et al, [1986, p.262-270, eng] 41-1756
- Study of tabular ground ice bodies from the Ledyanaya Gora section in the Yenisey valley using the oxygen isotope method. Valkmise, R.A., et al, [1986, p.32-38, eng] 41-1789
- Stratification in an ice core from Vestfonna, Nordaustlandet. Punning, I.A.-M.K., et al, [1986, p.39-43, eng] 41-1790
- Review of the history of atmospheric CO<sub>2</sub> recorded in ice cores. Oeschger, H., et al, [1986, p.89-108, eng] 41-2221
- Core temperature measurements on three Arctic icebergs. Goodrich, L.E., [1987, p.103-107, eng] 41-2409
- Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core. De Angelis, M., et al, [1987, p.318-321, eng] 41-2505
- Firn studies at upstream B, Siple Coast. Alley, R.B., et al, [1985, p.65-66, eng] 41-2627
- Ice core study of antarctic climatic history. Mayewski, P.A., et al, [1985, p.71-72, eng] 41-2631
- Ice cores tell composition of ancient atmospheres. Stauffer, B., [1985, p.72-73, eng] 41-2632
- International antarctic glaciological program activities at South Pole Station and Vostok. Lorius, C., [1985, p.73-74, eng] 41-2633

- Ice cores (cont.)**
- Baffin Bay environmental change during last interglacial/glacial transition. Andrews, J.T., et al., [1985, p.333-355, eng] **41-2682**
- Diatoms beneath the Greenland ice and climatic changes. Harwood, D.M., [1986, p.304-308, eng] **41-2688**
- Long-term climatic changes indicated by crystal growth in polar ice. Petit, J.R., et al., [1987, p.62-64, eng] **41-2750**
- Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap. Thompson, L.G., et al., [1986, p.361-364, eng] **41-2860**
- Two Be-10 peak depositions in ice during last glaciation. Raisbeck, G.M., et al., [1987, p.273-277, eng] **41-2891**
- Oceanic inclusions in the J-9 sea-ice core. Zotikov, I.A., et al., [1985, p.113-115, eng] **41-2952**
- Microheterotrophs in the ice-edge zone: an AMERIEZ study. Garrison, D.L., et al., [1985, p.136-137, eng] **41-2958**
- Nitrate deposition in Antarctica: temporal and spatial variations. Laird, C.M., [1986, 268p., eng] **41-3155**
- Contribution to the study of sediments in the Bransfield Strait region. Silva Martins, L.R., et al., [1987, p.127-146, por] **41-3156**
- Siple ice core data reveals biospheric CO<sub>2</sub> emissions. Siegenthaler, U., et al., [1987, p.140-154, eng] **41-3196**
- Pollen record from the Agassiz Ice Cap, northern Ellesmere Island, Canada. Bourgeois, J.C., [1986, p.345-354, eng] **41-3470**
- Ice coring and testing, Issungnak 1980—results of NRC's data collection. Frederking, R., [1981, 5p. + figs., eng] **41-3554**
- Sea ice meiofauna at Showa Station. Hoshiai, T., et al., [1986, p.118-124, eng] **41-3634**
- Borehole closure at Mizuho Station. Kawada, K., et al., [1986, p.66-73, eng] **41-3659**
- Textures and fabrics of 700-m deep ice core from Mizuho Station. Narita, H., et al., [1986, p.74-77, eng] **41-3660**
- Volume expansion of a 413.5-m Mizuho core after its recovery. Nakawo, M., [1986, p.78-85, eng] **41-3661**
- JARE-26 glaciological research, 1984-1986. Ageta, Y., et al., [1987, 71p., eng] **41-3668**
- Glaciological characteristics of an ice core in Patagonia. Yamada, T., [1987, p.59-67, eng] **41-3828**
- Ice core drilling operations in the Northern Patagonia Icefield. Yamada, T., et al., [1987, p.151-155, eng] **41-3840**
- Polar ice cores. Palais, J.M., [1987, p.55-60, eng] **41-3937**
- Ice core study on Wisconsinan ice thickness on Ellesmere I., Canada. Koerner, R.M., et al., [1987, p.296-301, eng] **41-4079**
- Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] **41-4124**
- Be-10 concentrations in Greenland ice. Monaghan, M.C., [1987, p.197-203, eng] **41-4279**
- Chemical fractionation of brine in McMurdo Ice Shelf. Cragin, J.H., et al., [1986, p.307-313, eng] **41-4281**
- Grain growth in polar ice: Pts. 1 and 2. Alley, R.B., et al., [1986, p.415-433, eng] **41-4297**
- Last interglacial/glacial cycle in Greenland. Funder, S., [1984, p.261-278, eng] **41-4324**
- Sulphuric acid in the antarctic ice sheet. Legrand, M., et al., [1987, p.671-676, eng] **41-4325**
- JARE reports bottom topography and ice cores, Queen Maud Land. Yoshida, M., et al., [1987, p.221-224, eng] **41-4463**
- Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP. Boudron, C.F., et al., [1987, p.1197-1202, eng] **41-4603**
- Ice coring drills**
- Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples. Kerimov, A.M., et al., [1985, p.71-78, rus] **41-846**
- Recommendations for a U.S. ice coring program. [1986, 67p., eng] **41-1352**
- Development of an ice core drill for liquid-filled holes. Suzuki, Y., et al., [1986, p.86-92, eng] **41-3662**
- Ice core drilling operations in the Northern Patagonia Icefield. Yamada, T., et al., [1987, p.151-155, eng] **41-3840**
- Ice cover**
- Cold region structural engineering. Eranti, E., et al., [1986, 529p., eng] **41-338**
- Ice cover on Kerguelen during the last glacial. Hall, K., [1984, p.225-232, eng] **41-481**
- Combined optical and radar methods for studying the environment. Shestopalov, V.P., et al., [1984, p.963-964, eng] **41-515**
- Deglaciation of the mountainous region of NW Montana. Carrara, P.E., et al., [1986, p.317-325, eng] **41-1179**
- Glaciation level in West Greenland. Humlum, O., [1985, p.311-319, eng] **41-1250**
- Development of the South Shetland Islands and the Antarctic Peninsula. Barsch, D., et al., [1986, p.211-218, eng] **41-1279**
- Summer 1979: ice climatology of the Canadian Arctic. Dey, B., [1985, p.25-33, eng] **41-1481**
- Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al., [1986, p.199-228, rus] **41-1668**
- Climatic belts in the case of a unipolar glaciation. Flohn, H., [1984, p.609-620, eng] **41-1974**
- CATCO: remote alt terrain heavy transportation. Peterson, S., [1986, p.670-678, eng] **41-2050**
- Ice cover. Markham, W.E., [1986, p.101-116, eng] **41-2593**
- Some developments in shaped charge technology. Mellor, M., [1986, p.575-604, eng] **41-2678**
- Water jet ice penetration. Gregory, W.E., et al., [1986, p.619-622, eng] **41-2680**
- Project ice buster. Miles, R.T., et al., [1986, p.623-643, eng] **41-2681**
- Scientific problems and basic results of the "Kosmos-1500" experiment. Afanas'ev, I.U.A., et al., [1986, p.4-20, rus] **41-2715**
- Atlas of the polar regions. [1985, 66p., eng] **41-2884**
- Mass balance of two high Arctic Plateau ice caps. Bradley, R.S., et al., [1987, p.123-128, eng] **41-3605**
- Radiometric properties of snow, ice and water. Steyn-Ross, D.A., et al., [1986, p.971-980, eng] **41-3992**
- Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] **41-4280**
- Snow and ice features shown by thematic mapper and MSS images. Orheim, O., et al., [1987, p.109-118, eng] **41-4445**
- Ice cover distribution**
- See: Ice conditions; Sea ice distribution
- Ice cover effect**
- Effects of ice cover on tidal currents and freshwater content. Prinsenberg, S.J., [1986, p.298-327, eng] **41-153**
- Flow patterns generated by an ice keel in stratified flow. Topham, D.R., et al., [1986, p.328-349, eng] **41-154**
- Science program of the FRAM experiments in the Eastern Arctic Ocean. Baggeroer, A.B., et al., [1985, p.420-428, eng] **41-221**
- Non-resonant acoustic projector (NRAP) for low frequency studies. Burke, S.P., et al., [1985, p.454-459, eng] **41-227**
- Testing of an oil recovery concept for use in brash and mulched ice. [1986, 43p., eng] **41-269**
- Behaviour and fate of arctic oil spills. Bobra, A.M., et al., [1986, p.13-23, eng] **41-341**
- Random transport of oil by sea ice. Colony, R., [1986, p.25-39, eng] **41-342**
- Oil in ice computer simulation model. Wotherspoon, P.D., et al., [1986, p.41-46, eng] **41-343**
- Coastal ecology and the Arctic oil industry. Sendstad, E., [1986, p.87-96, eng] **41-347**
- Sewage treatment in Yellowknife, N.W.T. Soniasy, R.N., et al., [1986, p.129-139, eng] **41-350**
- Impact of a scientific conference—conference summary. Bridge, W.A., [1986, p.185-190, eng] **41-353**
- Seasonal variation of chlorophyll-a in fast ice near Davis Station. Lu, P., [1986, p.11-19, chi] **41-397**
- Some ecological observations on antarctic ice algae. Zhang, K., et al., [1986, p.49-59, chi] **41-399**
- Snow and ice in Earth's environment. Kotliakov, V.M., [1986, 157p., rus] **41-698**
- Synoptic-scale influences of snow cover and sea ice. Ross, B., et al., [1986, p.1795-1810, eng] **41-988**
- Benthic microalgal standing stock distribution patterns at McMurdo Sound. Dayton, P.K., et al., [1986, p.207-213, eng] **41-1015**
- Inshore seasonal changes in diatoms near Davis Station. Everitt, D.A., et al., [1986, p.3-12, eng] **41-1173**
- Surface wind along the Icefield Ranges, Yukon Territory, Canada. Nickling, W.G., et al., [1985, p.125-134, eng] **41-1224**
- Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al., [1984, p.159-165, eng] **41-1280**
- Sea ice and the antarctic winter atmospheric circulation. Mitchell, J.F.B., et al., [1986, p.953-969, eng] **41-1474**
- Wind over ice: a mechanism for the generation of ice-coupled waves. Squire, V.A., [1986, p.115-128, eng] **41-1587**
- Microalgal carbon assimilation in sea ice of East Antarctica. McConville, M.J., et al., [1985, p.135-141, eng] **41-1629**
- Climatological study of gale-producing polar lows near Norway. Wilhelmssen, K., [1986, p.31-39, eng] **41-1798**
- Dissolved-oxygen depressions under ice cover in two Yukon rivers. Whitfield, P.H., et al., [1986, p.1675-1679, eng] **41-1863**
- Outfall mixing design in shallow coastal water under Arctic ice cover. Jirka, G.H., et al., [1985, p.856-862, eng] **41-1913**
- Maintenance measures and road safety. Roine, M., et al., [1983, p.262-266, fin] **41-1934**
- Effects of snow and ice on wetland water chemistry. Campbell, J., et al., [1984, p.143-147, eng] **41-1955**
- Ice cover effect on Odonata larvae in a pond. Beresford, D., [1984, p.165-181, eng] **41-1958**
- Seismic exploration system. White, A.H., [1983, 6 col., eng] **41-1982**
- Cloud/cryosphere interactions in the marginal snow and ice zones. Barry, R.G., [1984, p.605-607, eng] **41-2009**
- Air cushion vehicle *Larus* in the Beaufort Sea. Wainwright, J., et al., [1986, p.693-709, eng] **41-2052**
- Case study: oil recovery beneath ice. Allen, A.A., [1978, p.261-266, eng] **41-2123**
- Peculiarities of ecosystems distribution in the Barents Sea. Golikov, A.N., et al., [1986, p.7-8, rus] **41-2386**
- Tracing fecal pollution by coprostanol in an ice-covered Finnish lake. Dureth, S., et al., [1986, p.131-149, eng] **41-2477**
- Photosynthesis and carbon metabolism of phytoplankton from McMurdo Sound, Pt. I. Rivkin, R.B., et al., [1987, p.249-259, eng] **41-2504**
- Perennial N<sub>2</sub> supersaturation in an antarctic lake. Wharton, R.A., et al., [1987, p.343-345, eng] **41-2506**
- Morphology, hydraulics and sediment transport of an ice-covered river. Lawson, D.E., et al., [1986, 37p., eng] **41-2612**
- Hydraulics of river ice. Shen, H.T., [1985, 78p., eng] **41-2935**
- Photoadaptive strategies in a natural population of *Phaeocystis pouchetii* in McMurdo Sound. Palmisano, A.C., et al., [1985, p.133-134, eng] **41-2957**
- Microheterotrophs in the ice-edge zone: an AMERIEZ study. Garrison, D.L., et al., [1985, p.136-137, eng] **41-2958**
- Phytoplankton from the southwestern Atlantic Ocean. Fryxell, G.A., et al., [1985, p.143-145, eng] **41-2959**
- Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses. Rivkin, R.B., et al., [1985, p.146-147, eng] **41-2960**
- Upper ocean. McPhee, M.G., [1986, p.339-394, eng] **41-2990**
- Surface heat and mass balance. Maykut, G.A., [1986, p.395-463, eng] **41-2991**
- Circulation and mixing in ice-covered waters. Carmack, E.C., [1986, p.641-712, eng] **41-2996**
- Internal waves in the Arctic Ocean: a review. Morison, J., [1986, p.1163-1183, eng] **41-3005**
- Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microbial communities. Palmisano, A.C., et al., [1987, p.165-173, eng] **41-3132**
- Bacterial production in annual sea ice in McMurdo Sound. Kottmeier, S.T., et al., [1987, p.175-186, eng] **41-3133**
- Calculating the non-erosive velocity of a stream for sandy ground in freezing weather. Skrebkov, G.P., et al., [1986, p.74-77, rus] **41-3260**
- On the oceanic circulation near a shelf-ice edge. Van Heijst, G.J.F., [1987, p.37-56, eng] **41-3273**
- Spectral downwelling irradiance in an antarctic lake. Palmisano, A.C., et al., [1987, p.145-151, eng] **41-3426**
- Oil slicks in ice covered rivers. Berry, B.A., et al., [1985, p.369-379, eng] **41-3471**
- Surface chlorophyll a distribution in the marginal ice zone, 1984-1985. Fukuda, Y., et al., [1986, p.24-33, eng] **41-3630**
- Ice-algae photosynthesis under fast ice at Showa Station. Satoh, H., et al., [1986, p.34-42, eng] **41-3631**
- Decomposition of organic matter under fast ice at Lützow-Holm Bay. Matsuda, O., et al., [1986, p.55-66, eng] **41-3632**
- Phytoplankton in the marginal ice zone of the Greenland Sea during summer, 1984. Spies, A., [1987, p.195-205, eng] **41-3684**
- Phytoplankton in marine sediments of Frobisher Bay. Hsiao, S.I.C., [1987, p.245-251, eng] **41-3685**
- Modeling of BOD-DO dynamics in an ice-covered river in northern China. Hou, R., et al., [1987, p.247-251, eng] **41-3967**
- Generation of unstable modes of the ice-ward-attenuating swell by ice breeze. Chu, P.C., [1987, p.828-832, eng] **41-3996**
- Intracellular photosynthate allocation and the control of Arctic marine ice algal production. Smith, R.E.H., et al., [1987, p.124-132, eng] **41-3998**
- Polynuclear hydrocarbon concentrations from oil spilled in seawater. Ventajas, L., [1986, 15p., spa] **41-3999**
- Cone penetration tests of the sediments off Richards I., N.W.T. Kurfurst, P.J., [1987, p.939-944, eng] **41-4018**
- Thermohaline water stratification in the southern ocean from ice cover data. Bagriantsev, N.V., et al., [1986, p.18-27, rus] **41-4183**
- Ice cover effect on surface and internal gravity waves. Savchenko, V.G., [1986, p.103-110, rus] **41-4203**
- Enhanced solar radiation along coastal Hudson Bay. Rouse, W.R., [1987, p.670-674, eng] **41-4209**
- Water temperature and heat flux at the base of river ice covers. Marsh, P., et al., [1987, p.33-50, eng] **41-4214**
- Hydraulic engineering. [1987, 1162p., eng] **41-4220**
- Composite resistance to flow with an ice cover. Alger, G.R., et al., [1987, p.812-817, eng] **41-4223**
- Observation of the planetary boundary layer in the marginal ice zone. Kellner, G., et al., [1987, p.6955-6965, eng] **41-4251**
- Evolution of dissolved oxygen in the Arctic mixed layer. Top, Z., [1987, p.7191-7194, eng] **41-4271**

- Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., et al., 1987, p.134-146, eng. 41-4278
- Oceanographic influences on the sea ice cover in the Sea of Okhotsk. Gratz, A.J., et al., 1981, 18p., eng. 41-4327
- Lake ice, radiation, and oxygen deficit at temperate lakes. Prowse, T.D., et al., 1986, p.386-403, eng. 41-4536
- Under ice ecology pilot program, Great Lakes. Bolsenga, S.J., et al., 1986, 44p. + append., eng. 41-4581
- Ice cover strength**
- Elasticity and viscosity of floating, model ice-cover. Iakunin, A.E., 1986, p.124-128, rus. 41-455
- Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al., 1986, p.175-196, eng. 41-1095
- Ice fracture mechanics and some of its applications. Goldstein, R.V., et al., 1986, p.197-210, eng. 41-1096
- Use of sea ice for cargo unloading. Nazintsev, I.U., et al., 1986, p.120-126, rus. 41-1268
- Time and temperature effects in the performance of drilling ice platforms. Vinogradov, A.M., 1986, p.397-405, eng. 41-1607
- Official specifications for ice roads and actual bearing capacity. Palosuo, E., 1984, p.18-19, fin. 41-1937
- Forecasting ice breakup dates for Siberian rivers. Liser, I.A., 1986, p.42-60, rus. 41-1965
- Air services support to northern operators. Davidson, D., 1986, p.279-294, eng. 41-2032
- Contribution of snow to ice bridges. Coutermarsh, B.A., et al., 1987, p.133-137, eng. 41-2414
- Second Workshop on Ice Penetration Technology, 1986. 1986, 659p., eng. 41-2652
- Role of sea ice motion in ice penetration. Denner, W.W., et al., 1986, p.135-153, eng. 41-2656
- Variability of Arctic sea ice drafts. Tucker, W.B., et al., 1986, p.237-256, eng. 41-2662
- On the profile properties of undeformed first-year sea ice. Cox, G.F.N., et al., 1986, p.257-330, eng. 41-2663
- Ice penetrator scale model and full scale test results. Rychnovsky, R., 1986, p.385-414, eng. 41-2667
- Ice penetrating buoy tests. Iddings, D.W., et al., 1986, p.451-460, eng. 41-2670
- Feasibility tests of autonomous antenna deployment through ice. Hrubes, J.D., et al., 1986, p.461-471, eng. 41-2671
- Kinematic model of ice penetration with lateral loading. Young, C.W., et al., 1986, p.473-479, eng. 41-2672
- Response of penetrators into ice targets. Kipp, R.J., et al., 1986, p.481-493, eng. 41-2673
- Some experimental findings regarding the mechanical properties of sheet ice. Epifanov, V.P., 1985, p.178-187, eng. 41-2971
- Equipment for mechanized drilling of ice covers. Tavrizov, V.M., 1987, p.13-15, rus. 41-3066
- Winter navigation—a Finnish specialty. Varsta, P., 1985, p.10-13, rus. 41-3084
- See also: Ice strength
- Ice cover structure**
- Ice movement according to the FGGE buoys. Losev, S.M., et al., 1986, p.77-88, rus. 41-4199
- Disturbances of the continuity of sea-ice covers in winter. Gorbunov, I.U.A., et al., 1986, p.110-116, rus. 41-4204
- Ice cover thickness**
- Radar sounding of ice on fresh-water bodies. Klemiat, K.I., et al., 1986, p.134-138, rus. 41-122
- Arctic sea ice and ice island movement, thickness and mechanical properties. Sackinger, W.M., et al., 1986, p.63-80, eng. 41-367
- Seasonal variation of chlorophyll-a in fast ice near Davis Station. Lu, P., 1986, p.11-19, chi. 41-397
- Some ecological observations on antarctic ice algae. Zhang, K., et al., 1986, p.49-59, chi. 41-399
- H<sub>2</sub> trology of the Baykal Amur Railroad area. Lobroumov, B.M., ed., 1986, 135p., rus. 41-420
- River ice cover and winter drainage in the BAM zone. Kolov, B.L., et al., 1986, p.11-33, rus. 41-422
- Nileus, river ice covers and winter drainage in permafrost areas. Kravchenko, V.V., 1986, p.34-84, rus. 41-423
- Impulse radar sounding of level first-year sea ice from an icebreaker. Martinson, C.R., 1985, 9p., eng. 41-461
- Ice production in the northern Baltic proper. Stössel, A., 1985, p.261-284, eng. 41-485
- Naval power plants and equipment. Panin, I.U.I., ed., 1984, 153p., rus. 41-554
- Short-pulse radar investigations of freshwater ice sheets and brash ice. Arcone, S.A., et al., 1986, 10p., eng. 41-594
- Refraction correction for radio echo-sounding of ice overlain by firm. Rasmussen, L.A., 1986, p.192-194, eng. 41-678
- Calculating water level variations on freezing rivers. Agal'tseva, N.A., et al., 1986, p.48-51, rus. 41-700
- All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings. 1986, 236p., rus. 41-702
- Atmosphere and snow cover effects on emissive properties of ice. Pichugin, A.P., et al., 1986, p.119-123, rus. 41-703
- Autoregression methods of measuring ice thickness. Kalmykov, A.A., et al., 1986, p.126-130, rus. 41-705
- Remote sensing of sea ice by complex radar-radiometric methods. Gavrilenko, A.S., et al., 1986, p.130-134, rus. 41-706
- Ice thickness distribution in the Arctic islands, 1980. Wetzel, V., 1981, 15p. + tables, eng. 41-803
- Models of the Filchner-Ronne Ice Shelf thickness distributions. Lange, M.A., et al., 1986, p.10,457-10,462, eng. 41-1022
- Errors in measuring ice thickness by airborne radar. Bogorodskii, V.V., et al., 1985, p.660-662, eng. 41-1042
- Field measurements of ice growth suppression by surface insulation. Christensen, F.T., 1986, p.436-446, eng. 41-1111
- Using image recognition in classifying conditions of icing. Gorlach, I.A., 1985, p.62-71, rus. 41-1196
- Glacier thickness and velocity measurements. Sheremet'ev, A.N., 1986, p.127-132, rus. 41-1269
- Model tests on ice-rubble size and ship resistance in ice rubble. Ettema, R., et al., 1986, p.229-243, eng. 41-1291
- Effectiveness of thermal viewing equipment for ice surveying. Ovsiannikov, V.A., 1985, p.82-83, rus. 41-1406
- Archive of the ice record from Knob Lake, Quebec, 1954 to present. Adams, P., et al., 1985, p.284-289, eng. 41-1506
- High-resolution electromagnetic altimetry over the ocean. Won, I.J., 1986, p.327-332, eng. 41-1511
- Soviet glaciological studies on the eastern ice field in 1984-1985. 1986, p.10-16, rus. 41-1633
- Formulas for calculating sea ice volume in the Arctic Ocean. Mironov, E.U., 1986, p.69-72, rus. 41-1640
- Results of sounding Altai glaciers with a portable radar. Nikitin, S.A., et al., 1986, p.116-121, rus. 41-1650
- Ice thickness inductor probe. Warren, H.B., Jr., et al., 1983, 10 col., eng. 41-1675
- Device for determining frost depth and density. Huneidi, F., 1983, 4 col., eng. 41-1765
- Geophysical fieldwork on the Ronne Ice Shelf. Herrod, L.D.B., et al., 1986, p.9-14, eng. 41-1786
- Multi-year experience of remote sensing of ice thickness on the St. Lawrence River. Batson, G., et al., 1984, p.86-100, eng. 41-1950
- Current ice road and structure design and construction procedures. Masterson, D.M., et al., 1986, p.602-648, eng. 41-2048
- Dynamics of temperature fields during accretion of floating ice. Bondarev, E.A., et al., 1986, p.39-42, rus. 41-2152
- Providing hydrometeorological information for building ice roads and crossings in the Irkutsk Region and the Buryat ASSR. Furman, M.Sh., 1986, p.217-221, rus. 41-2182
- Glacio-geophysical implications of NNSS positioning at Showa Station. Shibuya, K., 1986, p.327-346, eng. 41-2212
- Model calculation of glacial evolution. Krass, M.S., 1984, p.86-103, rus. 41-2357
- Eso's ice island shows how Arctic life goes on. Cottrill, A., 1987, p.42-48, eng. 41-2526
- Calibrating HEC-2 in a shallow, ice-covered river. Calkins, D.J., et al., 1986, 25 refs., eng. 41-2531
- Mean height, volume and thickness of the antarctic ice sheet. Suetova, I.A., 1986, p.217-220, rus. 41-2551
- Ice blasting. Tavrizov, V.M., 1986, 136p., rus. 41-2646
- Electromagnetic properties of sea ice. Kovacs, A., et al., 1986, p.57-133, eng. 41-2655
- Role of sea ice motion in ice penetration. Denner, W.W., et al., 1986, p.135-153, eng. 41-2656
- Forecasting ice thickness and concentration in the Arctic. Preller, R.H., et al., 1986, p.155-164, eng. 41-2657
- Prediction of the occurrence of thin ice features. Farmer, L.D., et al., 1986, p.207-223, eng. 41-2660
- Ice cover thickness measurements in the Arctic Ocean. McLaren, A.S., et al., 1986, p.225-235, eng. 41-2661
- Variability of Arctic sea ice drafts. Tucker, W.B., et al., 1986, p.237-256, eng. 41-2662
- Thick ice penetrator. Swearingen, J.C., et al., 1986, p.495-520, eng. 41-2674
- Kinetic energy ice penetrating tactical sonobuoy. Everett, R.N., et al., 1986, p.521-547, eng. 41-2675
- Portable hot water ice drill. Tucker, W.B., et al., 1986, p.549-564, eng. 41-2676
- Characteristics of radar echoes from sea ice. Nikitin, P.A., 1986, p.85-92, rus. 41-2719
- Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes. Mitnik, L.M., et al., 1986, p.93-97, rus. 41-2720
- Calculating meteorological elements over the Okhotsk Sea. Petrov, A.G., 1986, p.3-9, rus. 41-2721
- New technique to gauge sea ice. Johnstone, B., 1987, p.653, eng. 41-2737
- Sea ice operation: McMurdo Sound-Granite Harbour. Pyne, A.R., 1986, p.5-13, eng. 41-2870
- Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al., 1986, p.21-23, eng. 41-2941
- Ice thickness distribution—measurement and theory. Rothrock, D.A., 1986, p.551-575, eng. 41-2994
- First time above the North Pole. Stromilov, N.N., 1986, 134p., rus. 41-3014
- Sea ice thickness distribution in the Arctic Ocean. Bourke, R.H., et al., 1987, p.259-280, eng. 41-3037
- Equipment for mechanized drilling of ice covers. Tavrizov, V.M., 1987, p.13-15, rus. 41-3066
- Winter navigation—a Finnish specialty. Varsta, P., 1985, p.10-13, rus. 41-3084
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al., 1987, 272p., rus. 41-3145
- HF (high frequency) over-the-horizon mapping of the Greenland icecap. Sales, G.S., 1983, p.(11)1-(11)12, eng. 41-3229
- Ice thickness data, winter 1979-1980. 1987, 43p., eng. 41-3253
- Results of modeling high latitude climates. Nagurnyi, A.P., 1986, p.21-32, eng. 41-3263
- Plane and radial ice-shelf flow with prescribed temperature profile. Morland, L.W., et al., 1987, p.117-140, eng. 41-3277
- Ice conditions at Issungnak, 1978-79. Shinde, S.B., 1981, 25p. + append., eng. 41-3361
- Noise and vibration of motorships in thick ice cover. Zinchenko, V.I., et al., 1986, p.48-63, rus. 41-3390
- On the role of water film in the mechanism of flashover of ice insulators. Sugawara, N., et al., 1986, p.281-284, eng. 41-3416
- Ice thickness and structure of the Vernagtferner, Austrian Alps. Blindow, N., et al., 1986, p.43-60, eng. 41-3525
- Thermodynamic model of first year sea ice. Gibson, R., 1987, p.105-119, eng. 41-3603
- Thickness of the Ronne Ice Shelf. Engelhardt, H., et al., 1987, p.318-319, eng. 41-3640
- Step frequency radar for the measurement of sea ice thickness. Okamoto, K., et al., 1986, p.56-65, eng. 41-3658
- JARE-26 glaciological research, 1984-1986. Ageta, Y., et al., 1987, 71p., eng. 41-3668
- Phytoplankton in marine sediments of Frobisher Bay. Hsiao, S.I.C., 1987, p.245-251, eng. 41-3685
- Design margins for icebreakers. Nikolaev, V., 1987, p.42-45, rus. 41-3793
- Ice thickness data, winter 1980-1981. 1987, 50p., eng. 41-3812
- Ice thickness deduced from gravity anomalies in Patagonia. Casassa, G., 1987, p.43-57, eng. 41-3827
- Ice thickness data, 1978-80, Queen Elizabeth Is., N.W.T. Wetzel, V.F., 1981, 35p., eng. 41-3925
- Through the ice mining study—final report. Crawford, M.W., et al., 1983, 5 sections + append., eng. 41-3926
- Operation of technical equipment in freezing weather. Voloshnikov, D., et al., 1987, p.78-80, rus. 41-3933
- Ice core study on Wisconsin ice thickness on Ellesmere I., Canada. Koerner, R.M., et al., 1987, p.296-301, eng. 41-4079
- Ice-breaking ferry boats of Lake Baykal. Andrienko, V.G., 1987, p.284-301, rus. 41-4149
- Amount of ice and heat required for its melting in the Far-Eastern seas of the USSR. Iakunin, L.P., 1986, p.93-96, rus. 41-4201
- Thermal ice drill for profiling thick multiyear ice. Poplin, J.P., et al., 1987, p.1-11, eng. 41-4211
- Portable hot-water ice drill. Tucker, W.B., et al., 1987, p.57-64, eng. 41-4216
- Dynamics and thermal regime of glaciers. Shumskii, P.A., et al., 1986, p.34-39, 152-157, rus. 41-4337
- Pack-ice thickness from side-lapping satellite images. Feldman, U., 1987, p.69-71, eng. 41-4437
- Problem of diminishing the force of icebreaker friction against ice. Maksutov, D.D., 1984, p.15-16, rus. 41-4508
- Adhesion of ice-snow masses to moving ships. Voevodin, V.A., 1984, p.17-19, rus. 41-4509
- Measurement of saline ice thickness using a step frequency radar. Iizuka, K., et al., 1986, 20p., eng. 41-4511
- Ice thickness data for selected Canadian stations, 1972-1976 winters. 1976, 4 pieces, eng. 41-4595
- See also: Glacier thickness
- Ice cracks**
- Nature of winter ruptures in sea ice covers. Gorbunov, I.U.A., et al., 1986, p.131-134, rus. 41-121
- Iceberg splitting and its implications for deterioration modelling. Diemand, D., et al., 1986, p.429-440, eng. 41-158
- Theory of microfracture healing in ice. Colbeck, S.C., 1986, p.89-95, eng. 41-261
- Ice fracture mechanics and some of its applications. Goldstein, R.V., et al., 1986, p.197-210, eng. 41-1096
- Ice fracturing induced by offshore operations. Romagnoli, R., et al., 1986, p.399-408, eng. 41-1109
- Indentation tests of laboratory and field ice sheets. Kawasaki, T., et al., 1986, p.712-724, eng. 41-1127
- Ice forces on vertical cylindrical structures. Clough, H.F., et al., 1986, p.245-259, eng. 41-1292
- Scale effect in ice. Gershunov, E.M., 1986, p.277-284, eng. 41-1294
- On fracture mechanics in lifting an ice sheet. Liu, C.H., et al., 1985, p.189-197, eng. 41-1359

## Ice cracks (cont.)

- Mechanism of ice breakup on rivers and canals. Kozitski, I.E., [1982, p.70-82, eng] 41-1442
- Desiccation processes in the Werenskiold Glacier forefield, W Spitsbergen. Cegla, J., [1986, p.5-24, eng] 41-1549
- Scaling in ice fracture mechanics. Atkins, A.G., [1986, p.67-73, eng] 41-1583
- Mechanical behavior of sea ice. Sunder, S.S., [1986, p.87-102, eng] 41-1585
- Fracture toughness of freshwater ice as a function of loading rate. Nixon, W.A., et al, [1986, p.287-296, eng] 41-1599
- Fracture toughness of ice over a range of grain sizes. Nixon, W.A., et al, [1985, 10p. + figs., eng] 41-1600
- Tensile strength of ice with preexisting cracks. Hoxie, S., [1986, 7p., eng] 41-2132
- Effects of rate, temperature and microstructure on ice cracks. Nixon, W.A., [1986, 6p., eng] 41-2135
- Study of fracture toughness of columnar grained ice using large specimens. Kusumoto, S., et al, [1986, p.887-891, jpn] 41-2200
- Acoustic emission study on multi-year sea ice in an arctic field laboratory. Sinha, N.K., [1985, p.S290-S293, eng] 41-2309
- Modelling the mechanical properties of ice. Szyzskowski, W., et al, [1987, p.159-165, eng] 41-2417
- Experimental investigations on scale effect of Bohai sea ice. Shen, W., et al, [1987, p.173-179, eng] 41-2419
- Terminal fracture model for ice. Sunder, S.S., et al, [1987, p.225-233, eng] 41-2425
- On the splitting of icebergs—natural and induced. Diemand, D., et al, [1987, p.379-385, eng] 41-2446
- Small-scale projectile penetration in saline ice. Cole, D.M., et al, [1986, p.415-438, eng] 41-2668
- Vertical ice forces on long straight walls. Christensen, F.T., [1987, p.215-218, eng] 41-3031
- Preliminary measurements of terminal crack velocity in ice. Parsons, B.L., et al, [1987, p.233-238, eng] 41-3034
- Ice Island underfoot. Chilingarov, A., et al, [1986, 175p., rus] 41-3250
- Effect of grain size on the internal fracturing of polycrystalline ice. Cole, D.M., [1986, 71p., eng] 41-3479
- Random discontinuous model of sea ice motion. Thorndike, A.S., [1987, p.6515-6520, eng] 41-3642
- Moving loads on sea ice. Squire, V.A., et al, [1987, p.569-575, eng] 41-3855
- Fractures in arctic winter pack ice (North Water, northern Baffin Bay). Steffen, K., [1987, p.211-214, eng] 41-4460
- Comparison between the cracks of landslide debris and glacier cracks. Fujita, Y., [1985, p.49-55, jpn] 41-4590
- Ice creep**
- Trial construction of 20-m span ice dome. Kokawa, T., et al, [1986, p.67-73, jpn] 41-439
- Physics of ice sheets and underlying bedrock. Birchfield, G.E., et al, [1985, p.11294-11302, eng] 41-494
- Finite element modeling of glaciers. Nixon, W.A., et al, [1985, p.11303-11311, eng] 41-495
- Radio-echo investigations of Ronne Ice Shelf. Crabtree, R.D., et al, [1986, p.37-41, eng] 41-735
- Antarctic ice sheet topography and surface-bedrock relationships. McIntyre, N.F., [1986, p.124-128, eng] 41-753
- Flow near an ice divide: analysis problems and data requirements. Waddington, E.D., et al, [1986, p.171-174, eng] 41-763
- Ice divide at Blue Glacier, U.S.A. Waddington, E.D., et al, [1986, p.175-176, eng] 41-764
- Ice pack motion from AVHRR imagery. Ninnis, R.M., et al, [1986, p.10725-10734, eng] 41-1012
- Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al, [1986, p.175-196, eng] 41-1095
- Mechanical and dynamic properties and behaviour of polycrystalline ice. Youssef, H., [1986, p.283-298, eng] 41-1102
- Reinforced ice as a construction material—creep of reinforced ice beams. Grabe, G., [1986, p.793-806, eng] 41-1133
- Proposal of a constitutive equation of temperate firm. Ambach, W., et al, [1986, p.1-9, eng] 41-1299
- Nonlinear constitutive model for ice. Szyzskowski, W., et al, [1985, p.307-321, eng] 41-1357
- Evaluation of the rheological properties of columnar ridge sea ice. Brown, R.L., et al, [1986, p.55-66, eng] 41-1582
- Viscoelastic approach to the ice load evaluation. Kajaste-Rudnitski, J., et al, [1986, p.407-420, eng] 41-1608
- Rheologies of H<sub>2</sub>O ices I(h), II, and III at high pressures: a progress report. Kirby, S.H., et al, [1985, p.89-107, eng] 41-1699
- Creep of high-pressure ice VI. Sotin, C., et al, [1985, p.109-118, eng] 41-1700
- Glacio-geophysical implications of NNSS positioning at Showa Station. Shibuya, K., [1986, p.327-346, eng] 41-2212
- Modelling the mechanical properties of ice. Szyzskowski, W., et al, [1987, p.159-165, eng] 41-2417
- Constitutive modeling of ice. Vinogradov, A.M., [1987, p.181-188, eng] 41-2420
- Effective poisson's ratio of isotropic ice. Sinha, N.K., [1987, p.189-195, eng] 41-2421
- Determining the creep properties of ice. Ladanyi, B., et al, [1987, p.253-259, eng] 41-2429
- Explicit technique for calculating first year ice loads on structures. Walden, J.T., et al, [1987, p.267-272, eng] 41-2431
- Creep analysis of a first-year sea ice sheet. Phifer, E.H., [1987, p.351-356, eng] 41-2442
- Some aspects of the flow of the Ronne Ice Shelf. Doake, C.S.M., [1987, p.75-98, eng] 41-3275
- Unconfined ice-shelf flow. Morland, L.W., [1987, p.99-116, eng] 41-3276
- Plane and radial ice-shelf flow with prescribed temperature profile. Morland, L.W., et al, [1987, p.117-140, eng] 41-3277
- Ice-shelf backpressure: form drag versus dynamic drag. MacAyeal, D.R., [1987, p.141-160, eng] 41-3278
- Ice stream-ice shelf interaction in West Antarctica. Bindshadler, R.A., et al, [1987, p.161-180, eng] 41-3279
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] 41-3280
- Finite-element method applied to a time-dependent flowband model. Fastook, J.L., [1987, p.203-221, eng] 41-3282
- Subglacial aquifer bed model and water pressure dependent basal sliding. Engle, C.S., et al, [1987, p.249-263, eng] 41-3284
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] 41-3286
- Mikkaglacieren: bed topography and response to 20th century climate change. Holmlund, P., [1986, p.291-302, eng] 41-3561
- Borehole closure at Mizuho Station. Kawada, K., et al, [1986, p.66-73, eng] 41-3659
- Sea-ice indentation in creeping mode. Chehayeb, F.S., et al, [1987, p.965-983, eng] 41-3762
- Thermomechanical balances of ice sheet flows. Morland, L.W., [1984, p.237-266, eng] 41-3791
- Shear-heating instabilities in the down-slope creep of ice sheets. Yuen, D.A., et al, [1986, p.314-320, eng] 41-4282
- Motion of sub-freezing ice past particles. Walder, J.S., [1986, p.41-4296, eng] 41-4296
- Rheological properties of ice loaded with microparticles. Fisher, D.A., et al, [1986, p.501-510, eng] 41-4305
- Simulation of Erebus Glacier Tongue thermal regime. Stolle, D.F.E., et al, [1986, p.530-534, eng] 41-4309
- Ice crossings**
- Strength of the natural and artificial river-water ice. Derugin, A.G., et al, [1986, p.219-222, rus] 41-138
- Construction of temporary winter roads and ice crossings. Titavea, G.A., et al, [1986, p.13-14, rus] 41-914
- Role of Soviet academicians during WW2. Kotliakov, V.M., et al, [1986, p.19-25, rus] 41-1819
- Problems of engineering glaciology. Alekseev, V.R., ed, [1986, 223p., rus] 41-2145
- Theory and practice of the spray-cone ice formation technique. Khodakov, V.G., et al, [1986, p.60-66, rus] 41-2154
- Strength of granular ice. Derugin, A.G., et al, [1986, p.129-134, rus] 41-2165
- Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice. Tregub, G.A., et al, [1986, p.153-158, rus] 41-2169
- Providing hydrometeorological information for building ice roads and crossings in the Irkutsk Region and the Buryat ASSR. Furman, M.Sh., [1986, p.217-221, rus] 41-2182
- Contribution of snow to ice bridges. Coutermarsh, B.A., et al, [1987, p.133-137, eng] 41-2414
- For northern construction sites. Malyshev, A.I.A., [1986, p.49-50, rus] 41-2792
- Ice crystal growth**
- Extended summaries from Conference on Cloud Physics, 1982. [1982, 587p., eng] 41-1
- Experimental study of the ice column habit transitions. Cho, N., et al, [1982, p.100-102, eng] 41-6
- Ice crystal formation in clouds due to aircraft penetration. Hobbs, P.V., et al, [1982, p.107-110, eng] 41-8
- Effects of liquid water content in clouds on ice crystal production. Foster, T., et al, [1982, p.123-126, eng] 41-12
- Storage effects on ice-forming nuclei measurements. Braham, K.R., Jr., et al, [1982, p.127-130, eng] 41-13
- Hydrometeor distributions in California rainbands. Gordon, G.L., et al, [1982, p.207-210, eng] 41-17
- Precipitation near the top of a maritime convective cloud. Willis, P.T., et al, [1982, p.211-214, eng] 41-18
- High altitude tropical cirrus cloud observations. Booker, D.R., et al, [1982, p.215-217, eng] 41-19
- Observation of ice aggregation at temperatures near -50 C. Stickel, P.G., [1982, p.226-229, eng] 41-22
- Simulation of orographic clouds with a nonlinear, time-dependent model. Cotton, W.R., et al, [1982, p.322-324, eng] 41-24
- Ice crystal growth in a supercooled cloud tunnel. Fukuta, N., et al, [1982, p.325-328, eng] 41-25
- Experimental and theoretical studies of ice crystal habit development. Fukuta, N., et al, [1982, p.329-332, eng] 41-26
- Ice crystal production in cumulus. Cerni, T.A., [1982, p.346-349, eng] 41-31
- Liquid water limitation to ice particle growth. Super, A.B., et al, [1982, p.350-353, eng] 41-32
- Microphysical processes in supercooled cumuli. Xu, J.-L., et al, [1982, p.370-373, eng] 41-37
- Glaciating of Montana and Florida summer cumuli. Lamb, D., et al, [1982, p.374-377, eng] 41-38
- Analysis of silver in individual ice particles after cloud seeding. Nagamoto, C., et al, [1982, p.378-380, eng] 41-39
- Ice and supercooled water evolution in convective clouds. Rodi, A.R., [1982, p.465-468, eng] 41-58
- Supercooled liquid water and ice crystal distribution in winter storms. Heggli, M., et al, [1982, p.469-472, eng] 41-59
- Radar and aircraft observations of generating cells. Martner, B.E., [1982, p.473-476, eng] 41-60
- Study of ice crystal formation in a stably stratified orographic cloud. DeMott, P.J., et al, [1982, p.488-490, eng] 41-64
- Subcooled liquid clouds from mountaintop observations. Hindman, E.E., et al, [1982, p.491-494, eng] 41-65
- Supercooling and crystallization of water heavy water and organic substances. Bogdanov, N.M., et al, [1985, p.30-43, rus] 41-553
- Method for growing large single crystals of sea ice. Kawamura, T., [1986, p.320-303, eng] 41-691
- From snowflakes to ice grains. Microphysical aspects of snow making. Admirat, P., [1985, p.33-44, fre] 41-862
- Ice crystallization in continuous crystallizers. Shirai, Y., et al, [1986, p.2241-2246, eng] 41-1348
- Constitutional supercooling in natural ice. Jones, R.E., [1985, p.188-196, eng] 41-1494
- Unfrozen compartmentalized water in gels during cooling and warming. Murase, N., et al, [1986, p.5420-5426, eng] 41-2107
- Kinetics and mechanism of homogeneous crystallization of water. Golubev, V.N., [1986, p.5-10, rus] 41-2146
- Crystallization of motionless supercooled water. Smorygin, G.I., [1986, p.16-23, rus] 41-2148
- Effect of natural convection on ice crystal growth rates in salt solutions. Huang, J.S., et al, [1985, p.747-752, eng] 41-2333
- Wind tunnel investigation on the riming of snowflakes. Lew, J.K., et al, [1986, p.2392-2417, eng] 41-2360
- Long-term climatic changes indicated by crystal growth in polar ice. Petit, J.R., et al, [1987, p.62-64, eng] 41-2750
- Growth, structure, and properties of sea ice. Weeks, W.F., et al, [1986, p.9-164, eng] 41-2987
- Antifreeze glycoproteins from polar fish blood. Feeney, R.E., et al, [1986, p.59-78, eng] 41-3165
- Building hydraulic structures on perennially frozen rocks. Novikov, N.F., [1986, p.62-66, rus] 41-3447
- Ice crystal growth form and mechanism at low atmospheric saturation. Gonda, T., et al, [1986, p.30-37, eng] 41-3655
- Quantitative prediction of secondary ice production rates. Harris-Hobbs, R.L., et al, [1987, p.1071-1082, eng] 41-3852
- Grain growth in unstrained polycrystalline ice. Gow, A.J., [1987, p.(C1)277-(C1)281, eng] 41-3958
- Grain growth in polar ice: Pts. 1 and 2. Alley, R.B., et al, [1986, p.415-433, eng] 41-4297
- Ice crystal dynamics during ice nucleation of supercooled fog. Pashenko, A.E., et al, [1987, p.269-275, eng] 41-4363
- Formation of frozen drops, conglomerates, and graupel. Parungo, F.P., et al, [1984, p.103-105, eng] 41-4378
- Mechanism of habit development in diffusional ice crystal growth. Fukuta, N., et al, [1984, p.159-162, eng] 41-4381
- Aerodynamic conditions of ice crystal growth by aggregation and droplet deposition. Podzimek, J., [1984, p.173-176, eng] 41-4385
- Collection efficiencies of soft-hail pellets for ice crystals. Saunders, C.P.R., et al, [1984, p.177-178, eng] 41-4386
- Ice crystal growth in temperature-ice supersaturation field. Wang, A.S., [1984, p.179-182, eng] 41-4387
- Ice crystal growth at different temperature and ice supersaturation. Wang, A.S., et al, [1984, p.183-186, eng] 41-4388
- Kinetics of ice crystal formation in "dynamic" cloud conditions. DeMott, P.J., et al, [1984, p.189-190, eng] 41-4389
- Development of ice crystal concentrations in stably stratified orographic cloud systems. DeMott, P.J., et al, [1984, p.191-194, eng] 41-4390
- Secondary ice multiplication by "splintering" in low stratocumulus clouds. Duroure, C., et al, [1984, p.195-198, eng] 41-4391
- Secondary ice particle production by rime fragmentation and crystal breakup. Griggs, D.J., et al, [1984, p.199-202, eng] 41-4392
- Microphysical origin of graupel and hail. Fukuta, N., et al, [1984, p.257-260, eng] 41-4395



- Numerical model of stratiform cloud. Hu, Z., et al, 1984, p.617-619, eng 41-4410
- Dynamics, microphysics, radiation and ice phase in clouds and fog. Khvorost'yanov, V.I., et al, 1984, p.625-628, eng 41-4411
- Precipitation initiation through cloud seeding. English, M., et al, 1984, p.707-710, eng 41-4412
- Artificial crystallization zones. Kudriavtseva, S.K., et al, 1984, p.719-722, eng 41-4413
- Dual polarisation radar measurements of the evolution of ice in clouds. Illingworth, A.J., et al, 1984, p.787-790, eng 41-4418
- Frazil measured in the laboratory and in the field. Taang, G., 1986, p.115-128, eng 41-4515
- Ice crystal nuclei**
- Extended summaries from Conference on Cloud Physics, 1982. 1982, 587p., eng 41-1
- Ice crystal formation in clouds due to aircraft penetration. Hobbs, P.V., et al, 1982, p.107-110, eng 41-8
- Measurements of natural ice nuclei. Rogers, D.C., 1982, p.115-118, eng 41-10
- Hydrometeor distributions in California rainbands. Gordon, G.L., et al, 1982, p.207-210, eng 41-17
- Ice crystal and ice nucleus measurements in cap clouds. Vali, G., et al, 1982, p.333-334, eng 41-27
- Echo formation in Colorado cumulus. Knight, C.A., et al, 1982, p.342-345, eng 41-30
- Liquid water limitation to ice particle growth. Super, A.B., et al, 1982, p.350-353, eng 41-32
- Field evidence of summer convective processes on the Texas South Plains. Jurica, G.M., et al, 1982, p.354-357, eng 41-33
- Sensitivity to cloud microphysical processes. Cotton, W.R., et al, 1982, p.358-361, eng 41-34
- Case study of hydrometeors in Florida cumuli. Parungo, F., et al, 1982, p.366-369, eng 41-36
- Glaciation of Montana and Florida summer cumuli. Lamb, D., et al, 1982, p.374-377, eng 41-38
- Analysis of silver in individual ice particles after cloud seeding. Nagamoto, C., et al, 1982, p.378-380, eng 41-39
- Melting of spherical ice particles. Rasmussen, R.M., et al, 1982, p.388-391, eng 41-42
- Characteristics of icing conditions in wintertime stratiform clouds. Politovich, M.K., 1982, p.404-407, eng 41-44
- Study of ice crystal formation in a stably stratified orographic cloud. DeMott, P.J., et al, 1982, p.488-490, eng 41-64
- Ice crystal concentration in orographic clouds. Grant, L.O., et al, 1982, p.584-587, eng 41-71
- Supercooling and crystallization of water, heavy water and organic substances. Bogdanov, N.M., et al, 1985, p.30-43, rus 41-553
- Periodic phase transformations in liquids. Akulichev, V.A., et al, 1986, 280p., rus 41-1271
- Nucleation mechanism of ice crystals under electrical effect. Shichiri, T., et al, 1986, p.502-508, eng 41-2105
- International Cloud Physics Conference, 9th, Tallin, 1984. 1984, 3 vols. (835p.), eng 41-4369
- Kinetics of ice crystal formation in "dynamic" cloud conditions. DeMott, P.J., et al, 1984, p.189-190, eng 41-4389
- Development of ice crystal concentrations in stably stratified orographic cloud systems. DeMott, P.J., et al, 1984, p.191-194, eng 41-4390
- Secondary ice multiplication by "splintering" in low stratocumulus clouds. Duroure, C., et al, 1984, p.195-198, eng 41-4391
- Frozen drop embryos in Alberta hailstorms and their origins. English, M., et al, 1984, p.253-255, eng 41-4394
- Ice crystal optics**
- Polarization and Brewster angle properties of light pillars. Sassen, K., 1987, p.570-580, eng 41-3150
- Faceted snow crystals. Hallett, J., 1987, p.581-588, eng 41-3151
- Multiple-scattering effects in halo phenomena. Tränkle, E., et al, 1987, p.591-599, eng 41-3152
- Ice crystal replicas**
- Replication of ice crystals using Formvar: techniques and precautions. Griggs, D.J., et al, 1986, p.547-551, eng 41-3222
- Ice crystal size**
- Removal processes of aerosols in ice fog. Ohtake, T., et al, 1982, p.57-60, eng 41-3
- Ice nucleus measurement. Schnell, R.C., et al, 1982, p.119-122, eng 41-11
- Development of graupel particles and hailstones in storms. Heymsfield, A.J., 1982, p.434-437, eng 41-51
- Ice crystallization in continuous crystallizers. Shirai, Y., et al, 1986, p.2241-2246, eng 41-1348
- Long-term climatic changes indicated by crystal growth in polar ice. Petit, J.R., et al, 1987, p.62-64, eng 41-2750
- Antifreeze glycoproteins from polar fish blood. Feeney, R.E., et al, 1986, p.59-78, eng 41-3165
- Textures and fabrics of 700-m deep ice core from Mizuho Station. Narita, H., et al, 1986, p.74-77, eng 41-3660
- On the microstructure and ice water content of high clouds. Kosarev, A.L., et al, 1984, p.73-76, eng 41-4375
- Role of ice crystals on ice accretion processes. Gayet, J.F., et al, 1984, p.737-740, eng 41-4415
- Ice crystal structure**
- Experimental study of the ice column habit transitions. Cho, N., et al, 1982, p.100-102, eng 41-6
- Observed changes in ice crystal type in thick stratiform clouds. Dyer, R.M., et al, 1982, p.201-202, eng 41-15
- Ice evolution versus precipitation in the Duero Basin. Vali, G., et al, 1982, p.218-221, eng 41-20
- Seeding of stratus and nimbostratus clouds. Hirsch, J.H., et al, 1982, p.222-225, eng 41-21
- Physics of columnar and planar ice crystals. Wang, P.K., et al, 1982, p.338-341, eng 41-29
- Hailstone density and terminal velocity. Knight, N.C., et al, 1982, p.442-445, eng 41-53
- New clues for decoding hailstone structure. Pfau, J.C., et al, 1982, p.446-449, eng 41-54
- Difference in energy between cubic and hexagonal ice. Handa, Y.P., et al, 1986, p.7009-7010, eng 41-188
- Amorphous ice made by "melting" ice I. Whalley, E., 1986, p.314-318, eng 41-891
- Raman spectrum of high-density amorphous ice. Klug, D.D., et al, 1986, p.475-478, eng 41-892
- Origin of kinks in polycrystalline ice. Wilson, C.J.L., et al, 1986, p.27-48, eng 41-1036
- Mechanical and dynamic properties and behaviour of polycrystalline ice. Youssef, H., 1986, p.283-298, eng 41-1102
- Ice clathrate and hexagonal ice at 77 K. Johari, G.P., et al, 1986, p.311-315, eng 41-1237
- Alignment of crystals in sea ice due to fluid motion. Langhorne, P.J., et al, 1986, p.197-214, eng 41-1289
- Yield and failure envelope for ice under multiaxial compressive stresses. Nadreau, J.P., et al, 1986, p.75-82, eng 41-1306
- Ice accretions on fixed cylinders. Prodi, F., et al, 1986, p.1091-1109, eng 41-1477
- Yield envelope for confined ice. Nadreau, J.P., et al, 1986, p.25-36, eng 41-1580
- Amorphous and porous ices in cometary nuclei. Smoluchowski, R., 1985, p.397-406, eng 41-1714
- Amorphous-crystalline phase transition and the light curve of comet P/Halley. Rickman, H., et al, 1985, p.419-428, eng 41-1716
- Cometary ices. Delsemme, A.H., 1985, p.505-517, eng 41-1721
- Agenda and presentations. 1986, Var.p., eng 41-2129
- Loading effect on compressive strength of polycrystalline ice. Haerte, R.N., 1986, c25p., eng 41-2130
- Effect of grain size distribution on the compressive strength of ice. Laughlin, J.L., 1986, c17p., eng 41-2131
- Fracture toughness of single crystal ice and columnar grained ice. Kusumoto, S., et al, 1985, p.19-27, jpn 41-2186
- Fracture toughness and macrofractography of single crystal ice. Uchida, T., et al, 1986, p.107-112, jpn 41-2187
- Study of fracture toughness of columnar grained ice using large specimens. Kusumoto, S., et al, 1986, p.887-891, jpn 41-2200
- Structure of high-density amorphous ice by neutron diffraction. Floriano, M.A., et al, 1986, p.3062-3064, eng 41-2240
- Microwave dielectric, structural and salinity properties of sea ice. Arcone, S.A., et al, 1986, p.832-839, eng 41-2297
- Molecular-packing analysis of the crystal structures of ice. Hall, D., et al, 1985, p.169-172, eng 41-2334
- Confined compressive strength of horizontal first-year sea ice samples. Richter-Menge, J.A., 1987, p.197-207, eng 41-2422
- Determination of mechanical properties of ice by quantum statistical approach and experiments. Schwarz, J., et al, 1987, p.245-252, eng 41-2428
- Reference strength of ice to be used in designing offshore structures. Tunik, A.L., 1987, p.285-290, eng 41-2434
- Dielectric studies of RbOH-doped ice and its phase transition. Kawada, S., et al, 1986, p.4485-4491, eng 41-2468
- Triaxial testing of first-year sea ice. Richter-Menge, J.A., et al, 1986, 41p., eng 41-2547
- Growth, structure, and properties of sea ice. Weeks, W.F., et al, 1986, p.9-164, eng 41-2987
- Crystal structure of Fram Strait sea ice. Gow, A.J., et al, 1986, p.20-29, eng 41-3056
- Multiple-scattering effects in halo phenomena. Tränkle, E., et al, 1987, p.591-599, eng 41-3152
- Scattering photometer for measuring single ice crystals and liquid droplets. Pluchino, A., 1987, p.614-620, eng 41-3153
- Effect of grain size on the internal fracturing of polycrystalline ice. Cole, D.M., 1986, 71p., eng 41-3479
- Amorphous water ice and its ability to trap gases. Bar-Nun, A., et al, 1987, p.2427-2435, eng 41-3575
- Crystal structure of ice accreted on an ice substrate. Nasello, O.B., et al, 1987, p.120-122, eng 41-3604
- Textures and fabrics of 700-m deep ice core from Mizuho Station. Narita, H., et al, 1986, p.74-77, eng 41-3660
- Improved approach to calculating terminal velocities of plate-like crystals and graupel. Heymsfield, A.J., et al, 1987, p.1088-1099, eng 41-3853
- Observation of internal structure in sea ice by X-ray computed tomography. Kawamura, T., et al, 1986, p.59-67, jpn 41-3880
- Annealing recrystallization in laboratory and naturally deformed ice. Gow, A.J., et al, 1987, p.(C1)271-(C1)276, eng 41-3957
- Grain growth in unstrained polycrystalline ice. Gow, A.J., 1987, p.(C1)277-(C1)281, eng 41-3958
- Sea-ice crystal structure and salinity, Hebron Fiord, Labrador. Gow, A.J., 1987, 18p., eng 41-4144
- Multiplicity of dielectric relaxation times of dispersed ice microcrystals. Pissis, P., et al, 1987, p.195-211, eng 41-4361
- Numerical simulation of hail embryo growth. Levi, L., et al, 1984, p.505-508, eng 41-4406
- Examination of double-plate ice crystals and the initiation of precipitation in continental cumulus clouds. Bruinjes, R.T., et al, 1987, p.1331-1349, eng 41-4424
- Ice crystals**
- Study of the motion of bodies simulating the fall of ice crystals. Podzimek, J., 1982, p.103-106, eng 41-7
- Case studies of ice distribution in hurricanes. Black, R.A., et al, 1982, p.335-337, eng 41-28
- Snowflake aggregation near the melting layer in stratiform clouds. Newman, S.B., 1982, p.381-383, eng 41-40
- Cloud liquid water in orographic storms. Rauber, R.M., et al, 1982, p.477-480, eng 41-61
- Microphysical growth processes in orographic clouds. Blumenstein, R.R., et al, 1982, p.481-484, eng 41-62
- Ice particle charge in convective clouds. Hallett, J., et al, 1982, p.566-567, eng 41-67
- Budget analysis of liquid water, vapor and ice in orographic clouds. Uttal, T., et al, 1982, p.572-575, eng 41-70
- Ross Ice Shelf oxygen isotopes and west antarctic climate history. Grootes, P.M., et al, 1986, p.49-67, eng 41-612
- Zones and excursions of cryocrystals. Sobolev, V.V., 1986, 206p., rus 41-997
- Stratosphere aerosol layer in winter. Iwasaka, Y., 1986, p.143-151, eng 41-1019
- Surface temperature effect on ice splinter production. Griggs, D.J., et al, 1986, p.1254-1256, eng 41-1478
- Computerized simulation of artificial seeding of clouds containing ice crystals. Bulkov, M.V., et al, 1986, p.3-16, rus 41-1555
- Airborne ice crystal concentration counters. Volkov, A.D., et al, 1986, p.99-107, rus 41-1556
- Metamorphism and thermophysical properties of friable ice. Smorygin, G.I., 1986, p.106-121, rus 41-2163
- Numerical simulation of orographic snowfall. Cotton, W.R., et al, 1986, p.1658-1680, eng 41-2500
- Characteristics of Arctic polar stratospheric clouds. Kent, G.S., et al, 1986, p.2149-2161, eng 41-2550
- Low temperature X-ray analysis of water/poly(oxyethylene) systems. Bogdanov, B., et al, 1986, p.628-634, eng 41-2573
- Palsa formation in North-Central Alaska. Hinkel, K.M., 1986, 217p., eng 41-2640
- Dynamic recrystallization and fabric development during the simple shear of ice. Burg, J.P., et al, 1986, p.857-870, eng 41-2809
- Ultrasonic attenuation and dislocation damping in crystals of ice. Tamura, J., et al, 1986, p.3445-3461, eng 41-2975
- On positronium formation in crystalline and amorphous ice at low positron energy. Mogensen, O.E., 1986, p.357-362, eng 41-3070
- Small-volume fog chamber with automatic recording of ice crystals. Gorbunov, B.Z., et al, 1986, p.248-249, eng 41-3161
- Formation kinetics of ice crystals on aerosol particles in supercooled fog. Effect of water vapor exhaustion. Gorbunov, B.Z., et al, 1986, p.333-334, eng 41-3162
- Classification of ambiguous ice particle shadowgraphs by consensus. Dyer, R.M., et al, 1985, p.675-679, eng 41-3218
- Vertical wind tunnel for snow process studies. Takahashi, T., et al, 1986, p.182-185, eng 41-3219
- Thermal device for aircraft measurement of the solid water content of clouds. King, W.D., et al, 1986, p.356-362, eng 41-3220
- Air flow and particle trajectories around aircraft fuselages. IV: orientation of ice crystals. King, W.D., 1986, p.433-439, eng 41-3221
- Freezing of cloud droplets at low moisture and pressure. Burchuladze, N.N., et al, 1986, p.20-31, rus 41-3463
- Cloud ice and wintertime storms over the mountains of northern Colorado. Rauber, R.M., 1987, p.488-524, eng 41-3761

**Ice crystals (cont.)**

Crystallography of Patterned Lake, Framnes Mountains. Chambers, J.L.C., et al., 1986, p.520-526, eng 41-4307

Dominant ice processes in summertime cumulus clouds in the Bethlehem area. Bruintjes, R.T., 1984, p.63-66, eng 41-4372

Wind tunnel investigation of the riming of model ice crystal aggregates. Rasmussen, R.M., et al., 1984, p.151-155, eng 41-4380

Coalescence kinetic equations for cloud droplets and ice particles. Yenukashvili, I.M., 1984, p.247-248, eng 41-4393

Geographic winter storm structure in California. Marwitz, J.D., 1984, p.315-316, eng 41-4403

Effects of topographic variations on the generation of aggregate snowflakes. Cotton, W.R., et al., 1984, p.613-616, eng 41-4409

Bispectral method for the height determination of optically thin ice clouds. Wendling, P., et al., 1984, p.827-830, eng 41-4422

Physical properties of liquid layers between ice and adfrozen material. Fedoseeva, V.I., 1984, p.19-24, rus 41-4510

**Ice cutting**

There are different types of ice. Berdnikov, D., 1986, p.46-47, rus 41-1399

Ice disaggregation system. Morgan, G.W., 1982, 8 col., eng 41-1676

Means for increasing the efficiency of an ice disaggregation system. Morgan, G.W., 1983, 8 col., eng 41-1677

Technical means for thermal drilling and cutting of ice. Morev, V.A., et al., 1986, p.37-39, rus 41-2151

Ice destruction. Methods and technology. Bogorodskii, V.V., et al., 1986, 214p., eng 41-2564

Thermal hole opener. Hansen, D.P., 1986, p.565-574, eng 41-2677

Drilling and slotting of ice and permafrost with water jets. Vijay, M.M., et al., 1986, p.177-187, eng 41-2936

Experimental ice navigation of diesel ship. Burkov, G., et al., 1986, p.42-45, rus 41-3204

Navigation and ship control. Collection of works. Panin, I.U.I., ed., 1986, 137p., rus 41-3383

Icebreaker pilotage of "Dmitrii Donskoi" type ships along the Yenisey River in the winter-spring season. Plotnikov, K.S., 1986, p.98-103, rus 41-3384

Ice-breaking ferry boats of Lake Baykal. Andrienko, V.G., 1987, p.284-301, rus 41-4149

Thermal hole opener. Hansen, D.P., 1987, p.51-56, eng 41-4215

**Ice dams**

Some practical aspects of graphical ice reduction. Hyvarinen, V., 1986, p.25-29, eng 41-534

Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed., 1986, 84p., rus 41-543

Calculating hydrological characteristics of the Mertsbakher Lake outburst. Glazyrin, G.E., et al., 1986, p.36-43, rus 41-546

Formation of ice-marginal embankments into ice-dammed lakes, Pleistocene. Booth, D.B., 1986, p.247-263, eng 41-563

Glacial lake drainage near Söndre Strömfjord, West Greenland. Gordon, J.E., 1986, p.304, eng 41-692

Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed., 1984, 110p., rus 41-721

Types of mudflows and danger areas in the Kirghiz Range. Bobushev, T.S., 1984, p.35-41, rus 41-725

St. Lawrence River hanging ice dams, winter 1983-1984. Shen, H.T., et al., 1984, 85p., eng 41-1669

Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice. Tregub, G.A., et al., 1986, p.153-158, rus 41-2169

Experience in ice dam construction. Vdovin, I.U.I., et al., 1986, p.177-183, rus 41-2174

Project of the experimental Yamberg ice-core dam. Danielian, I.U.S., et al., 1986, p.183-189, rus 41-2175

Cataclysmic Late Pleistocene flooding from glacial Lake Missoula: a review. Baker, V.R., et al., 1985, p.1-41, eng 41-2683

Professor Mathews, outburst floods, and other glaciological disasters. Clarke, G.K.C., 1986, p.859-868, eng 41-2685

Glacier-dammed lake investigations in the Hullet Lake area, South Greenland. Dawson, A.G., 1983, 24p., eng 41-3302

Glacier dam on the Rio Plomo: a cyclic phenomenon. Del Rosario Prieto, M., 1986, p.73-78, eng 41-3527

1985 surge and ice dam of Glaciar Grande del Nevado del Plomo, Argentina. Bruce, R.H., et al., 1987, p.131-132, eng 41-3607

Ice dams for protecting water areas of northern ports. Bogoslovskii, P.A., et al., 1987, p.78-80, rus 41-3652

Control of spring run-off in northern rivers: the ice veil concept. Lock, G.S.H., 1987, p.451-457, eng 41-3676

**Ice dating**

Buried glacier ice and related lithomorphogenetic problems. Karukiapp, R.I.A., 1986, p.78-83, rus 41-109

Possibilities of oxygen-isotope technique in studying ground ice. Arkhangelov, A.A., et al., 1986, p.88-92, rus 41-111

Using stable isotopes in studying ground ice. Kritsuk, L.N., et al., 1986, p.92-97, rus 41-112

Tritium content in different types of ice. Romanov, V.V., et al., 1986, p.98-100, rus 41-113

Dating ice-wedge growth in subarctic peatlands following deforestation. Payette, S., et al., 1986, p.724-727, eng 41-618

Determination of particle paths using the finite-element method. Stolle, D.F.E., et al., 1986, p.219-223, eng 41-681

Modeling the processes of radar sounding of ice covers. Timchenko, A.I., et al., 1986, p.123-126, rus 41-704

Remote sensing of sea ice by complex radar-radiometric methods. Gavrilenko, A.S., et al., 1986, p.130-134, rus 41-706

Application of (14)C dating to the studies of glacial geology and geocryology. Gu, G., et al., 1986, p.159-165, chj 41-1463

Long-term record of H<sub>2</sub>O<sub>2</sub> in polar ice cores. Neftel, A., et al., 1986, p.262-270, eng 41-1756

Glacier ice in Quaternary deposits of the Malyk-Siyenskaya basin. Bessaly, V.G., et al., 1984, p.107-116, rus 41-1911

Chronostratigraphy of syngenetic permafrost deposits by oxygen-isotope analysis. Arkhangelov, A.A., et al., 1986, p.415-417, rus 41-2307

Ice borehole gas sampler for isotopic dating. Zemsov, A.A., et al., 1984, p.72-78, rus 41-2355

Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap. Thompson, L.G., et al., 1986, p.361-364, eng 41-2860

Two Be-10 peak depositions in ice during last glaciation. Raisbeck, G.M., et al., 1987, p.273-277, eng 41-2891

Greenland ice-sheet margin—a mine of ice for paleo-environmental studies. Reeh, N., et al., 1987, p.229-234, eng 41-3794

Determination of radionuclides in meteorites, cosmic ray exposure and age. Herpers, U., et al., 1987, p.191-195, eng 41-4608

**Ice deformation**

Flow near an ice divide: analysis problems and data requirements. Waddington, E.D., et al., 1986, p.171-174, eng 41-763

Remote sensing of nonthermal radio emission of ice covers. Kachurin, L.G., et al., 1984, p.441-448, eng 41-819

West Antarctic ice sheet dynamics. Van der Veen, C.J., 1985, p.732-734, eng 41-983

Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al., 1986, p.175-196, eng 41-1095

Ice cover deformations at Adams Island, winter 1982-1983. Sayed, M., et al., 1986, p.346-354, eng 41-1160

Rheology of ice II and ice III from high-pressure extrusion. Echelmeyer, K., et al., 1986, p.693-696, eng 41-1261

Use of sea ice for cargo unloading. Nazintsev, I.U.L., et al., 1986, p.120-126, rus 41-1268

Proposal of a constitutive equation of temperate firm. Ambach, W., et al., 1986, p.1-9, eng 41-1299

Mechanical behavior of sea ice. Sunder, S.S., 1986, p.87-102, eng 41-1385

Sea ice testing in flexure—the importance of shear deformations. Murat, J.R., et al., 1986, p.209-224, eng 41-1593

Saturated porous layer beneath active ice stream. Blankenship, D.D., et al., 1986, p.54-57, eng 41-1779

Folding in the Greenland ice sheet. Whillans, I.M., et al., 1987, p.485-493, eng 41-1976

Level ice indentation on a pile array. Mizikos, J.P., et al., 1987, p.273-279, eng 41-2432

Shear heating instabilities of large ice sheets. Yuen, D.A., et al., 1985, p.74-75, eng 41-2634

Small-scale projectile penetration in saline ice. Cole, D.M., et al., 1986, p.415-438, eng 41-2668

Dynamic recrystallization and fabric development during the simple shear of ice. Burg, J.P., et al., 1986, p.857-870, eng 41-2809

On estimating ice stress from MIZEX 83 ice deformation and current measurements. Leppäranta, M., et al., 1986, p.17-19, eng 41-3055

Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., 1983, 274p., eng 41-3073

Some aspects of the flow of the Ronne Ice Shelf. Doake, C.S.M., 1987, p.75-98, eng 41-3275

Ice stream-ice shelf interaction in West Antarctica. Bindshadler, R.A., et al., 1987, p.161-180, eng 41-3279

Extrusion flow demonstrated by borehole deformation measurements over a riegel, Storglaciären, Sweden. Hooke, R.L., et al., 1987, p.72-78, eng 41-3599

Basal sliding and drift deformation in a China glacier. Echelmeyer, K., et al., 1987, p.83-98, eng 41-3601

Sea-ice indentation in creeping mode. Chehayeb, F.S., et al., 1987, p.965-983, eng 41-3762

Riiser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al., 1986, p.23-31, eng 41-4094

Disturbances of the continuity of sea-ice covers in winter. Gorbunov, I.U.A., et al., 1986, p.110-116, rus 41-4204

Wave ogives. Waddington, E.D., 1986, p.325-334, eng 41-4284

Rheological properties of ice loaded with microparticles. Fisher, D.A., et al., 1986, p.501-510, eng 41-4305

Intrinsic curve of ice under compression. Nardeau, J.P., et al., 1987, p.(C1)322-(C1)327, frej 41-4328

**Ice density**

Amorphous ice made by "melting" ice I. Whalley, E., 1986, p.314-318, eng 41-891

Raman spectrum of high-density amorphous ice. Klug, D.D., et al., 1986, p.475-478, eng 41-892

Density of accreted ice. Prodi, F., et al., 1986, p.1081-1090, eng 41-1476

Ice accretions on fixed cylinders. Prodi, F., et al., 1986, p.1091-1109, eng 41-1477

Structure of high-density amorphous ice by neutron diffraction. Floriano, M.A., et al., 1986, p.3062-3064, eng 41-2240

High-density amorphous ice. 3. Thermal properties. Handa, Y.P., et al., 1986, p.2766-2770, eng 41-2570

Pressure-induced phase transformations in ice. Tse, J.S., et al., 1987, p.1672-1675, eng 41-3645

Volume expansion of a 413.5-m Mizuho core after its recovery. Nakawo, M., 1986, p.78-85, eng 41-3661

Measurement of firm structure. Alley, R.B., 1986, p.391-396, eng 41-4294

Properties of ice accreted in a two stage growth. Prodi, F., et al., 1984, p.283-286, eng 41-4401

Role of low density riming growth in hail production. Farley, R.D., 1984, p.489-492, eng 41-4404

Icing of cylinders in a wind tunnel. Bain, M., et al., 1984, p.733-736, eng 41-4414

**Ice detection**

Spectra and liquid water content in aircraft icing environments. Glass, M., 1982, p.400-403, eng 41-43

Canadian East Coast Workshop on Sea Ice, 1986. 1986, 668p., eng 41-142

Side-looking airborne radar detection and identification of icebergs. Edwards, N.C., Jr., et al., 1986, p.546-554, eng 41-165

Ice monitoring and forecasting for the BeauDril Kulluk. Eley, F.J., 1986, p.598-614, eng 41-169

Ocean engineering and the environment—Oceans '85 Conference, Vol.1. 1985, 2 vols. (1364p.), eng 41-217

Iceberg detection by radar. Miller, J.D., et al., 1985, p.405-410, eng 41-218

Ice management on the Grand Banks. Hotzel, I.S., et al., 1985, p.416-419, eng 41-220

Acoustic noise measurements of icebergs. Miller, J.D., et al., 1985, p.460-463, eng 41-228

M.I.T. ice detector taxis for takeoff. Iversen, W.R., 1986, p.36, 38, eng 41-260

Marine radar for iceberg detection. Harvey, M.J., et al., 1986, 82p., eng 41-272

Iceberg detection by airborne radar. 1986, 235p., eng 41-275

National aircraft icing technology plan. Barney, W.S., 1986, 47p. + append., eng 41-478

Radar data used for ice detection. Harvey, M.J., et al., 1984, 17p., eng 41-605

Integrated ice monitoring system for Arctic offshore drilling. Leavitt, E., et al., 1986, p.107-118, eng 41-1093

Ice management techniques in ice infested waters. Borthwick, I., et al., 1986, p.323-339, eng 41-1104

Detection of small icebergs in the Arctic Ocean. Larsson, B., et al., 1986, p.358-363, eng 41-1105

Ice detection and weather information systems. 1985, 127p., eng 41-1414

Computer interfacing of meteorological sensors in severe weather. Rancourt, K., et al., 1985, p.205-211, eng 41-1496

Remote sensing of icebergs by ground-wave Doppler radar. Walsh, J., et al., 1986, p.276-284, eng 41-1510

Automatic anti-freeze system for solar water heaters. Bonnet, A., 1983, 10 col., eng 41-1980

Detection of aircraft icing using microwave radiometers. Pops Fotino, I.A., et al., 1986, p.975-982, eng 41-2302

Device for controlling ice formation on contoured surfaces. Cattaneo, C.J., et al., 1985, 6 col. + 3 sheets, eng 41-2499

Ice pavement detection system; Phase 1, SBIR. 1987, 125p., eng 41-3027

Rime meteorology in the Green Mountains. Ryerson, C.C., 1987, 46p., eng 41-3144

Close range ice hazard detection: Phase 2. De Heering, P., et al., 1987, 67p. + appends. (2 vols.), eng 41-3226

Acoustic radar detection of icebergs in pack ice. Marko, J.R., 1987, 135p., eng 41-3413

Ice detection systems—experimental feature. Final report. Petrak, A., et al., 1986, 11p. + append., eng 41-3510

- Ice and fog: detection and warning systems. December 1985-November 1986 (citations from the NTIS database). [1986, 33p., eng] 41-4128
- Ice/frost detection using millimeter wave radiometry. Final report for period 28 May 1980-31 August 1981. Gagliano, J.A., et al. [1981, 55p., eng] 41-4155
- Report of the International Ice Patrol in the North Atlantic. [1985, 90p., eng] 41-4576
- Ice hazard detection with ground wave radar. Dawe, B.J., et al. [1986, 84p., eng] 41-4580
- Ice deterioration**
- Geologic conditions of the burial of Pleistocene glacier ice in the Yenisey River area. Astakhov, V.I., [1986, p.72-78, rus] 41-108
- Iceberg splitting and its implications for deterioration modelling. Diemand, D., et al. [1986, p.429-440, eng] 41-158
- On the deterioration of a grounded iceberg. Venkatesh, S., [1986, p.442-471, eng] 41-159
- On the deterioration of a grounded iceberg. Venkatesh, S., [1986, p.161-167, eng] 41-675
- Problems of engineering glaciology. Alekseev, V.R., ed. [1986, 223p., rus] 41-2145
- Electromagnetic processes accompanying water crystallization and ice deterioration. Berri, B.L., et al. [1986, p.24-32, rus] 41-2149
- Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship. Makshtas, A.P., et al. [1986, p.139-145, eng] 41-3265
- Buried Pleistocene glacier ice on the Yenisey River. Astakhov, V.I., [1986, p.286-295, eng] 41-3619
- Moving loads on sea ice. Squire, V.A., et al. [1987, p.569-575, eng] 41-3855
- Role of shortwave radiation in the summer decay of a sea ice cover. Maykut, G.A., et al. [1987, p.7032-7044, eng] 41-4258
- Ice distribution**
- See: Ice conditions; Sea ice distribution
- Ice domes**
- See: Pingos
- Ice drills**
- Soviet glaciological studies on the eastern ice field in 1984-1985. [1986, p.10-16, rus] 41-1633
- Thermophysics of glaciers. Zotikov, I.A., [1986, 275p., eng] 41-2565
- Portable hot water ice drill. Tucker, W.B., et al. [1986, p.549-564, eng] 41-2676
- Ice penetration drill/anchor using ultrahigh-pressure waterjets. Echert, D.C.S., et al. [1986, p.605-617, eng] 41-2679
- Equipment for mechanized drilling of ice covers. Tavrizov, V.M., [1987, p.13-15, rus] 41-3066
- Equipment for making access holes through arctic sea ice. Mellor, M., [1986, 34p., eng] 41-3819
- Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124
- Thermal ice drill for profiling thick multiyear ice. Poplin, J.P., et al. [1987, p.1-11, eng] 41-4211
- Portable hot-water ice drill. Tucker, W.B., et al. [1987, p.57-64, eng] 41-4216
- Ice edge**
- Weddell-Scotia Sea MIZ, October 1984. Crasey, F.D., et al. [1986, p.3920-3924, eng] 41-93
- Sea ice concentration and ice edge position using remote sensing. Williams, D.R.P., [1986, p.526-536, eng] 41-163
- Automatic Arctic profiling system for oceanography under ice. Van Leer, J.C., [1985, p.433-436, eng] 41-223
- NORDA Arctic data collection, processing, and interpretation capabilities. Eppler, D.T., et al. [1985, 21p., eng] 41-243
- Sea ice off the Icelandic coasts, Oct. 1983-Sep. 1985. [1986, 43p., ice] 41-246
- Mapping edge of sea ice, Ellesmere Island, N.W.T. Jeffries, M.O., et al. [1986, p.96-99, eng] 41-747
- Ice air interaction theory for migration of marginal ice zone. Chu, P.C., [1986, p.863-883, eng] 41-869
- Water masses and circulation of the southern ocean. Sarukhanian, E.I., et al. [1986, 288p., rus] 41-1013
- Studying mass balance in the frontal zone of the Filchner-Ronne ice shelf, Antarctica. Kohnen, H., et al. [1986, p.136-139, 251-254, eng] 41-1069
- Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al. [1986, p.3920-3924, eng] 41-1361
- Oceanographic cruise to the Greenland Sea, Sep. 1985. Bourke, R.H., et al. [1986, 32p., eng] 41-1547
- Sea ice modelling in the East Greenland area. Larsen, J., et al. [1986, p.147-156, eng] 41-1590
- Structure of polar lows over the Norwegian and the Barents Seas. Shapiro, M.A., [1986, p.79-90, eng] 41-1800
- Atmospheric boundary layer modification in the marginal ice zone. Bennett, T.J., Jr., et al. [1986, p.13,033-13,044, eng] 41-1861
- Possible CO<sub>2</sub>-induced warming effects on the cryosphere. Barry, R.G., [1984, p.571-604, eng] 41-1973
- All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. [1986, 268p., rus] 41-2384
- Recent trends in studying the ecology of Polar seas of the Arctic. Matishov, G.G., [1986, p.1-5, rus] 41-2385
- Prediction of short-term ice edge drift. El-Tahan, M., et al. [1987, p.393-400, eng] 41-2448
- Sea ice off the Icelandic coasts, Oct. 1985-Sep. 1986. [1986, 32p., ice] 41-2490
- Arctic sea ice extent and drift, modeled as a viscous fluid. Ling, C.-H., et al. [1986, p.71-98, eng] 41-2577
- Ice-edge eddies in the Fram Strait marginal ice zone. Johannessen, O.M., et al. [1987, p.427-429, eng] 41-2802
- Remote sensing of the Fram Strait marginal ice zone. Shuchman, R.A., et al. [1987, p.429-431, eng] 41-2803
- Ocean dynamics and acoustic fluctuations in the Fram Strait marginal ice zone. Dyer, I., et al. [1987, p.435-436, eng] 41-2805
- Wilkes Land Expedition 1985: biological observations in the ice-edge zone. Garrison, D.L., et al. [1985, p.123-124, eng] 41-2954
- Photoadaptive strategies in a natural population of *Phaeocystis pouchetii* in McMurdo Sound. Palmisano, A.C., et al. [1985, p.133-134, eng] 41-2957
- Microheterotrophs in the ice-edge zone: an AMERIEZ study. Garrison, D.L., et al. [1985, p.136-137, eng] 41-2958
- Microheterotrophs in the ice-edge zone: an AMERIEZ study. Garrison, D.L., et al. [1985, p.136-137, eng] 41-2958
- Phytoplankton from the southwestern Atlantic Ocean. Fryxell, G.A., et al. [1985, p.143-145, eng] 41-2959
- Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses. Rivkin, R.B., et al. [1985, p.146-147, eng] 41-2960
- Stochastic description of atmosphere-sea ice-ocean interaction. Lemke, P., [1986, p.785-823, eng] 41-2999
- Seasonal ice zone. Wadhams, P., [1986, p.825-991, eng] 41-3000
- MIZEX—a program for mesoscale air-ice-ocean interaction experiments in Arctic marginal ice zones. MIZEX bulletin 7. [1986, 88p., eng] 41-3052
- Note on estimating melt rate in the MIZ. McPhee, M.G., [1986, p.1-6, eng] 41-3053
- Kinematics of marginal ice: MIZEX 83. Ito, H., [1986, p.7-16, eng] 41-3054
- On estimating ice stress from MIZEX 83 ice deformation and current measurements. Leppäranta, M., et al. [1986, p.17-19, eng] 41-3055
- Ice/air feedback mechanism for the migration of the marginal ice zone. Chu, P.C., [1986, p.54-64, eng] 41-3059
- Planetary boundary layer in the marginal ice zone. Brown, R.A., [1986, p.65-78, eng] 41-3060
- Air-ice-ocean coupled model for the formation of leads or polynyas. Chu, P.C., [1986, p.79-88, eng] 41-3061
- Bottom topography effect on ice flow, barotropic flow and baroclinic flow. Häkkinen, S., [1987, p.3807-3820, eng] 41-3062
- Effect of sub-ice mesoscale features within the marginal ice zone of Fram Strait. Manley, T.O., [1987, p.3944-3960, eng] 41-3063
- Comment on "Atmospheric boundary layer modification in the marginal ice zone" by T.J. Bennett, Jr. and K. Hunkins. Andreas, E.L., [1987, p.3965-3969, eng] 41-3064
- Arctic seas that never freeze. Dunbar, M.J., [1987, p.50-53, eng] 41-3149
- New data on the position of the Bellingshausen Ice Shelf. Iakovlev, V.N., et al. [1986, p.227-231, eng] 41-3202
- Ocean-atmosphere interactions and climatic changes in Northern Hemisphere. Nikolaev, I.U.V., ed. [1986, 163p., eng] 41-3262
- Studies of ice-edge zones of Arctic seas. Nikolaev, I.U.V., et al. [1986, p.131-138, eng] 41-3264
- Studies of the upper sea layer beneath the ice edge. Ivanov, B.V., et al. [1986, p.146-150, eng] 41-3266
- Studying sea-atmosphere interactions during the cold season. Bogorodskii, P.V., et al. [1986, p.151-157, eng] 41-3267
- On the oceanic circulation near a shelf-ice edge. Van Heijst, G.J.F., [1987, p.37-56, eng] 41-3273
- Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274
- West Spitsbergen current and adjacent waters in Fram Strait. Weigel, A.M., [1987, 98p., eng] 41-3306
- Upwelling at the ice edge: a mechanism for deep water formation. Häkkinen, S., [1987, p.5031-5034, eng] 41-3344
- Surface chlorophyll *a* distribution in the marginal ice zone, 1984-1985. Fukuda, Y., et al. [1986, p.24-33, eng] 41-3630
- Ice-algae photosynthesis under fast ice at Showa Station. Satoh, H., et al. [1986, p.34-42, eng] 41-3631
- Decomposition of organic matter under fast ice at Lützow-Holm Bay. Matsuda, O., et al. [1986, p.55-66, eng] 41-3632
- JARE-25 oceanographic and marine biological data, Feb. 1984-Jan. 1985. Matsuda, O., et al. [1987, 21p., eng] 41-3667
- Phytoplankton in the marginal ice zone of the Greenland Sea during summer, 1984. Spies, A., [1987, p.195-205, eng] 41-3684
- Analytical model for ice-edge upwelling. Van Heijst, G.J.F., [1984, p.155-177, eng] 41-3790
- Greenland ice-sheet margin—a mine of ice for paleo-environmental studies. Reeh, N., et al. [1987, p.229-234, eng] 41-3794
- Ice cap's marginal zone in connection with hydraulic power research. Thomsen, H.H., [1983, 24p., dan] 41-3893
- Winter marginal ice zone experiment, Fram Strait/Greenland Sea, 1987/89. Davidson, K., ed. [1986, 53p., eng] 41-3930
- Oxygen isotope ratio in meltwater of the ice cap, Jakobshavn. Reeh, N., et al. [1986, 34p., dan] 41-3938
- Morphological variation in antarctic diatom, genetic analysis. Wood, A.M., et al. [1987, p.42-54, eng] 41-3997
- Sea ice features using side-looking radar and Landsat imagery. Barnes, J.C., et al. [1981, 66p., eng] 41-4158
- Amount of ice and heat required for its melting in the Far-Eastern seas of the USSR. Iakunin, L.P., [1986, p.93-96, rus] 41-4201
- Evidence for two zones of debris entrainment beneath the Greenland ice sheet. Sugden, D.E., et al. [1987, p.238-241, eng] 41-4227
- Summer marginal ice zone experiments in the Fram Strait and Greenland Sea. Johannessen, O.M., [1987, p.6716-6718, eng] 41-4231
- Large-scale oceanography in Fram Strait during the 1984 Marginal Ice Zone Experiment. Quadfasel, D., et al. [1987, p.6719-6728, eng] 41-4232
- Eddies in the Fram Strait marginal ice zone, 1983 and 1984. Johannessen, J.A., et al. [1987, p.6754-6772, eng] 41-4235
- Biomass in the marginal ice zone of the Fram Strait, summer 1984. Smith, W.O., Jr., et al. [1987, p.6777-6786, eng] 41-4237
- Physical properties of summer sea ice in the Fram Strait. Tucker, W.B., et al. [1987, p.6787-6803, eng] 41-4238
- Sea ice morphology in the Fram Strait and Greenland Sea from remote sensing data. Campbell, W.J., et al. [1987, p.6805-6824, eng] 41-4239
- Microwave sea ice signatures in the marginal ice zone. Onstott, R.G., et al. [1987, p.6825-6835, eng] 41-4240
- Mapping mesoscale ocean structure within the interior marginal ice zone. Manley, T.O., et al. [1987, p.6837-6842, eng] 41-4241
- Ice concentration in the marginal ice zone, Fram Strait. Burns, B.A., et al. [1987, p.6843-6856, eng] 41-4242
- Acoustic propagation through an ice edge eddy, eastern Greenland Sea. Melberg, L.E., et al. [1987, p.6857-6868, eng] 41-4243
- Acoustic tomography in the marginal ice zone. Lynch, J.F., et al. [1987, p.6869-6885, eng] 41-4244
- Tomographic resolution of mesoscale eddies in the marginal ice zone: a preliminary study. Chiu, C.-S., et al. [1987, p.6886-6902, eng] 41-4245
- Structure, internal waves and intrusions in the Greenland Sea ice edge zone. Foster, T.D., et al. [1987, p.6903-6910, eng] 41-4246
- High-frequency internal wave observations in the marginal ice zone. Sandven, S., et al. [1987, p.6911-6920, eng] 41-4247
- Surface stress, heat flux and drag coefficient in the ice edge zone, 1983. Fairall, C.W., et al. [1987, p.6921-6932, eng] 41-4248
- Wind stress over rough ice in the ice edge zone, 1984. Anderson, R.J., [1987, p.6933-6941, eng] 41-4249
- Effect of ice conditions on the drag coefficient in the Greenland Sea ice edge zone. Guest, P.S., et al. [1987, p.6943-6954, eng] 41-4250
- Observation of the planetary boundary layer in the marginal ice zone. Kellner, G., et al. [1987, p.6955-6965, eng] 41-4251
- Instability theory of ice-air interaction for the formation of ice edge bands. Chu, P.C., [1987, p.6966-6970, eng] 41-4252
- Aerosol size distribution in the ice edge zone, 1983. Borrmann, S.H., et al. [1987, p.6971-6976, eng] 41-4253
- Boundary layer, upper ocean, and ice observations in the Greenland Sea marginal ice zone. Morison, J.H., et al. [1987, p.6987-7011, eng] 41-4255
- Bottom ablation and heat transfer in the ice edge zone, 1983. Josberger, E.G., [1987, p.7012-7016, eng] 41-4256
- Dynamics and thermodynamics of the ice-ocean system in the ice edge zone, Greenland Sea. McPhee, M.G., et al. [1987, p.7017-7031, eng] 41-4257
- Ice floe collisions in the Greenland Sea, 1984. Martin, S., et al. [1987, p.7071-7084, eng] 41-4262
- Role of floe collisions in sea ice rheology. Shen, H.H., et al. [1987, p.7085-7096, eng] 41-4263
- Spring blooming in Bering Sea during the ice edge retreat, 1980. Maynard, N.G., et al. [1987, p.7127-7139, eng] 41-4266
- Beaufort-Chukchi ice margin data from Seasat: ice motion. Carsey, F., et al. [1987, p.7163-7172, eng] 41-4268
- Shuttle Imaging Radar B Weddell Sea ice observations. Martin, S., et al. [1987, p.7173-7179, eng] 41-4269

## Ice edge (cont.)

- Density nutrients and phytoplankton in the ice edge zone of the Weddell-Scotia Sea. Nelson, D.M., et al., 1987, p.7181-7190, eng. 41-4270
- Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., 1987, p.134-146, eng. 41-4278

## Ice elasticity

- Elastic properties and equation of state of high pressure ice. Shaw, G.H., 1986, p.5862-5868, eng. 41-500
- Scaling in ice fracture mechanics. Atkins, A.G., 1986, p.67-73, eng. 41-1583
- Hugoniot of water ice. Gaffney, E.S., 1985, p.119-148, eng. 41-1701
- Viscoelasticity of flooded and spray ice using flatjacks. Spencer, P.A., et al., 1987, p.17-23, eng. 41-2397
- Viscoelasticity of ice under different loading conditions. Hamza, H., 1987, p.151-157, eng. 41-2416
- Constitutive modeling of ice. Vinogradov, A.M., 1987, p.181-188, eng. 41-2420
- Effective poisson's ratio of isotropic ice. Sinha, N.K., 1987, p.189-195, eng. 41-2421

## Ice electrical properties

- Ice particle charge in convective clouds. Hallett, J., et al., 1982, p.566-567, eng. 41-67
- Surface temperature effect on ice splinter production. Griggs, D.J., et al., 1986, p.1254-1256, eng. 41-1478
- Microwave dielectric, structural and salinity properties of sea ice. Arcone, S.A., et al., 1986, p.832-839, eng. 41-2297
- Strong fluctuation theory for moist granular media. Stogryn, A., 1985, p.78-83, eng. 41-2322
- Dielectric studies of RbOH-doped ice and its phase transition. Kawada, S., et al., 1986, p.4485-4491, eng. 41-2468
- Water effects on radiation induced microwave conductivity of frozen gels. Eden, J., et al., 1987, p.51-56, eng. 41-2807
- Growth, structure, and properties of sea ice. Weeks, W.F., et al., 1986, p.9-164, eng. 41-2987
- On positronium formation in crystalline and amorphous ice at low positron energy. Mogensen, O.E., 1986, p.357-362, eng. 41-3070
- Analysis of the tensor dielectric constant of sea ice at microwave frequencies. Stogryn, A., 1987, p.147-158, eng. 41-3315
- Ice as capacitor dielectric. Shimizu, N., et al., 1985, p.539-542, eng. 41-3349
- Multiplicity of dielectric relaxation times of dispersed ice microcrystals. Pissia, P., et al., 1987, p.95-211, eng. 41-4361
- Electromagnetic property trends in sea ice, Part I. Kovacs, A., et al., 1987, 45p., eng. 41-4368
- Ice erosion**
- Debris-influenced sliding laws and basal debris balance. Shoemaker, E.M., 1986, p.224-231, eng. 41-682
- Glacial giants. History of origin, existence and deterioration of great glaciers. Balandin, R.K., 1986, 175p., rus. 41-2252
- Relation between the susceptibility of permafrost landscapes and topographic dissection. Klimovskii, I.V., et al., 1986, p.113-121, rus. 41-3492
- Erosion of ice by ion irradiation. Benit, J., et al., 1987, p.838-842, eng. 41-4330
- River bank erosion and the influence of frost: a statistical examination. Lawler, D.M., 1986, p.227-242, eng. 41-4365

## Ice evaporation

## See: Ice sublimation

## Ice flocs

- Micromechanics approach to sea ice dynamics. Ostoja-Starzewski, M., et al., 1986, p.267-281, eng. 41-151
- Acoustic array sensor tracking system. Von der Heydt, K., et al., 1985, p.464-471, eng. 41-229
- Naval power plants and equipment. Panin, I.U.I., ed., 1984, 153p., rus. 41-554
- Interaction between submerged embankment and multi-year ice floes. Larsen, O.D., 1986, p.678-692, eng. 41-1124
- Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al., 1986, p.3920-3924, eng. 41-1361
- Dynamics of temperature fields during accretion of floating ice. Bondarev, E.A., et al., 1986, p.39-42, rus. 41-2152
- Dynamic loads on floating ice plate from uniformly moving body. Gushchin, V.V., et al., 1985, p.385-387, rus. 41-2329
- Flow of ice floe against a cylindrical structure. Vinogradov, O.G., et al., 1987, p.365-370, eng. 41-2444
- Prediction of short-term ice edge drift. El-Tahan, M., et al., 1987, p.393-400, eng. 41-2448
- Determination of the ice load on elements of marine hydraulic structures. Gol'din, A.L., et al., 1987, p.417-420, eng. 41-2601
- Allowing for stream and ice dynamics when calculating ice breakup on concentrated overfalls. Fomichev, B.S., 1986, p.83-87, rus. 41-2755
- Studying the effect of ground conditions on strength and stability of no-pilework bridge supports exposed to moving ice. Zhordochko, I.O., et al., 1987, p.101-104, rus. 41-3792

- Photogrammetric observations of the lateral melt of sea ice floes. Hall, R.T., et al., 1987, p.7045-7048, eng. 41-4259

- Mesoscale sea ice deformation in the East Greenland marginal ice zone. Leppäranta, M., et al., 1987, p.7060-7070, eng. 41-4261

- Ice floe collisions in the Greenland Sea, 1984. Martin, S., et al., 1987, p.7071-7084, eng. 41-4262

- Role of floe collisions in sea ice rheology. Shen, H.H., et al., 1987, p.7085-7096, eng. 41-4263

- Experiments on freeze-bonding between ice blocks in floating ice rubble. Ettema, R., et al., 1986, p.397-403, eng. 41-4295

- Studies of natural conditions and prospects for their application. Matveev, N.P., ed., 1985, 118p., rus. 41-4560

- Interaction of sea waves with discrete ice floes. Kobayashi, N., et al., 1987, 88p., eng. 41-4601

## Ice fog

- Removal processes of aerosols in ice fog. Ohtake, T., et al., 1982, p.57-60, eng. 41-3

- Measurement of the extinction of water ice particles. Krättschmer, W., et al., 1985, p.149-154, eng. 41-1702

## Ice forecasting

- Canadian East Coast Workshop on Sea Ice, 1986. 1986, 668p., eng. 41-142

- Long-range prediction of iceberg severity in the Labrador Sea. Wittman, W.L., et al., 1986, p.355-385, eng. 41-155

- Iceberg information service of environment Canada. Falkingham, J.C., 1986, p.557-560, eng. 41-166

- Ice and ice management on the Grand Bank. Ransom, J.A.N., et al., 1986, p.561-582, eng. 41-167

- Ice monitoring and forecasting for the BeauDril Kulluk. Eley, F.J., 1986, p.598-614, eng. 41-169

- Dome-Cannar's operational ice-forecasting system for the Beaufort Sea. Steen, J.W., et al., 1986, p.615-650, eng. 41-170

- Countermeasures against ice coating on trolley wires in Chiba District. Terada, S., 1985, p.37-38, jpn. 41-185

- Ice management on the Grand Banks. Hotzel, I.S., et al., 1985, p.416-419, eng. 41-220

- Physical approaches to iceberg severity prediction. Marko, J.R., et al., 1986, 104p., eng. 41-274

- Winter service on the municipal highways. Sauer, A., 1985, p.37-40, ger. 41-388

- National aircraft icing technology plan. Barney, W.S., 1986, 47p. + append., eng. 41-478

- Use of a computer model to predict the formation of ice on road surfaces. Parmenter, B.S., et al., 1986, 19p., eng. 41-1412

- Forecasting ice breakup dates for Siberian rivers. Liser, I.A., 1986, p.42-60, rus. 41-1965

- Long-range forecasting of ice conditions on rivers. Eremin, V.V., 1986, p.71-81, rus. 41-1966

- Modification of polar ice forecast subsystem—Arctic. Harr, P.A., et al., 1981, 20p., eng. 41-2191

- Users manual for a polar ice forecast subsystem—Arctic. Harr, P.A., 1981, 18p., eng. 41-2328

- Forecasting summer ice conditions in the Beaufort Sea. Pritchard, R.S., et al., 1987, p.371-377, eng. 41-2445

- Probabilistic analysis of sea ice in North Bohai Bay. Liu, T., et al., 1987, p.387-391, eng. 41-2447

- Sea ice forecasting. Benner, D.A., 1986, p.193-206, eng. 41-2659

- Prediction of the occurrence of thin ice features. Farmer, L.D., et al., 1986, p.207-223, eng. 41-2660

- Modeling ice cover evolution and ice redistribution. Appel, I.L., et al., 1986, p.71-77, rus. 41-4198

- Space-time variations in ice conditions of the Barents, White and Baltic seas. Sheremetevskaya, O.I., 1986, p.88-93, rus. 41-4200

- Mathematical model for river ice. Shen, H.T., et al., 1987, p.141-146, eng. 41-4221

- Ice prediction package cuts costs on Cheshire's gritting operation. 1987, p.20-22, eng. 41-4331

- Rotorcraft icing—progress and potential. 1986, 128p., eng. 41-4583

## Ice formation

- Hail formation in an Oklahoma multicell storm. Ziegler, C.L., et al., 1982, p.427-430, eng. 41-49

- Positive microrelief forms as a result of underground ice formation. Belopukhova, E.B., et al., 1986, p.84-88, rus. 41-1110

- Numerical modeling of river ice conditions in Finland. Reiter, P.H., et al., 1986, p.305-317, eng. 41-539

- Seas of the World Ocean. Sukhovet, V.F., 1986, 288p., rus. 41-556

- Glaciology and climatology of the North Water polynya, Baffin Bay. Muller, F., et al., 1976, 128p., eng. 41-606

- Calculating water level variations on freezing rivers. Agal'tseva, N.A., et al., 1986, p.48-51, rus. 41-700

- Scientific and technical progress in road construction. Altmatov, I.T., ed., 1984, 188p., rus. 41-785

- Influence of thermoinsulative layers on temperature regime of road pavements. Dulshenaliyev, M., 1984, p.140-145, rus. 41-786

- Frost formation between closely spaced parallel plates. Kamath, J., 1985, 121p., eng. 41-985

- Stratosphere aerosol layer in winter. Iwasaka, Y., 1986, p.143-151, eng. 41-1019

- Methods of numerical mapping of zones of intensive convection, clear-air turbulence, and icing. Abramovich, K.G., et al., 1985, p.3-15, rus. 41-1195

- Using image recognition in classifying conditions of icing. Goriach, I.A., 1985, p.62-71, rus. 41-1196

- Flume studies and field observations of the interaction of frazil ice and anchor ice with sediment. Kempema, E.W., et al., 1986, 48p., eng. 41-1210

- Slush ice as a geologic agent. Reimnitz, E., et al., 1986, 19p., eng. 41-1211

- Mechanical properties of atmospheric ice. Druetz, J., et al., 1986, p.67-74, eng. 41-1305

- Sea ice measurements at Davis Station. Zhang, Q., 1986, p.143-148, chi. 41-1461

- Snow and ice in Inuit place names in the eastern Canadian Arctic. Müller-Wille, L., 1985, p.55-57, eng. 41-1484

- Carbonated ice process and product. Hinman, D.C., et al., 1983, 10 col., eng. 41-1768

- Process for preparing gasified ice of improved stability. Kleiner, F., et al., 1983, 10 col., eng. 41-1770

- Origin and stratigraphic position of thick ground-ice layers in the Ledyanaya Gora outcrop. Karpov, E.G., 1986, p.73-78, rus. 41-1907

- Ice formation in hardened cement paste. Bager, D.H., et al., 1986, p.709-720, eng. 41-1998

- Ice formation in hardened cement paste. Bager, D.H., et al., 1986, p.835-844, eng. 41-2000

- Formation of segregated ice and frost heave of clays. Zamolotchkova, S.A., 1986, p.127-136, rus. 41-2093

- Experimental studies of injected ice formation in fine-grained rocks. Ershov, E.D., et al., 1986, p.136-149, rus. 41-2094

- Problems of engineering glaciology. Alekseev, V.R., ed., 1986, 223p., rus. 41-2145

- Kinetics and mechanism of homogeneous crystallization of water. Golubev, V.N., 1986, p.5-10, rus. 41-2146

- Electromagnetic processes accompanying water crystallization and ice deterioration. Berri, B.L., et al., 1986, p.24-32, rus. 41-2149

- Theory and practice of the spray-cone ice formation technique. Khodakov, V.G., et al., 1986, p.60-66, rus. 41-2154

- Process of hard snow formation on East Siberian roads. Maevskii, A.A., 1986, p.87-92, rus. 41-2160

- Metamorphism and thermophysical properties of friable ice. Smorygin, G.I., 1986, p.106-121, rus. 41-2163

- Surface icing of different materials. Golubev, V.N., 1986, p.121-128, rus. 41-2164

- Formation of a microscopic ice filament in an electric field. Aksutova, L.K., et al., 1985, p.619-620, eng. 41-2330

- All-Union tutorial seminar on mathematical modeling in science and technology. Summaries. 1986, 333p., rus. 41-2381

- Modeling the road icing process. Vorotnikov, V.I., et al., 1986, p.77-78, rus. 41-2383

- Effect of polysaccharide stabilizers on the rate of growth of ice. Muhr, A.H., et al., 1986, p.683-710, eng. 41-2491

- Water freezing and ice melting in fine-grained rocks. Ershov, E.D., 1986, p.53-66, rus. 41-2540

- Energy transfer in soil with nonequilibrium phase transformation. Danielian, I.U.S., et al., 1986, p.156-161, rus. 41-2558

- Distribution of depth hoar in Honshu, Japan. Izumi, K., et al., 1986, p.198-206, jpn. 41-2603

- Free boundary problems. Stojanovic, S.D., 1986, 93p., eng. 41-2642

- Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes. Mitnik, L.M., et al., 1986, p.93-97, rus. 41-2720

- Calculating meteorological elements over the Okhotsk Sea. Petrov, A.G., 1986, p.3-9, rus. 41-2721

- Ice dynamics in the Weddell Sea, 1980. Golosov, V.V., 1986, p.103-108, rus. 41-2723

- Dislocations in frozen, ice-containing, Pleistocene deposits of northern western Siberia. Danilov, I.D., 1986, p.28-41, rus. 41-2816

- Naleds of the northern Yenisey River area. Rivkin, F.M., 1986, p.132-138, rus. 41-2830

- Waters in active layers and naled formation. Poznanin, V.L., 1986, p.142-147, rus. 41-2832



- Using dry, low-cement concretes in permafrost areas. Zaitman, O.M., et al, [1986, p.31-35, rus] **41-2867**
- Size dependence of natural aerosol for ice nucleation. Berezinskii, N.A., et al, [1986, p.28-32, rus] **41-2879**
- Formation and melting of a vertical ice slab in an enclosure. Sorour, M.M., et al, [1987, p.167-177, eng] **41-2882**
- Ice formation in hardened cement paste, Pt.3. Bager, D.H., et al, [1987, p.1-11, eng] **41-2895**
- Northern lake and reservoir modeling. Gosink, J.P., [1987, p.281-300, eng] **41-3038**
- Effects of ice action under conditions of the lower connections of spherical liquefied-gas tanks. Pavel, A., [1986, p.628-630, rum] **41-3069**
- Determining heat conductivity coefficients of coarse grained materials used in embankment construction. Gorokhov, E.N., [1985, p.105-110, rus] **41-3130**
- Small-volume fog chamber with automatic recording of ice crystals. Gorbunov, B.Z., et al, [1986, p.248-249, eng] **41-3161**
- Formation kinetics of ice crystals on aerosol particles in supercooled fog. Effect of water vapor exhaustion. Gorbunov, B.Z., et al, [1986, p.333-334, eng] **41-3162**
- Ground ice in western Siberia. Grosval'd, M.G., et al, [1986, p.173-183, eng] **41-3197**
- Measurement of water temperature during frazil ice formation. Williams, G.P., [1984, 7p., eng] **41-3239**
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] **41-3249**
- Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship. Makhshtas, A.P., et al, [1986, p.139-145, eng] **41-3265**
- Vitrified liquid water to cubic ice phase transition. Hallbrucker, A., et al, [1987, p.503-505, eng] **41-3312**
- Chemical tests of antarctic hygroscopic aerosols. Ohtake, T., [1985, p.208-210, eng] **41-3325**
- Satellite methods of studying naleds and ground waters of eastern Pamir. Topchiev, A.G., [1986, p.48-58, rus] **41-3391**
- Ice formation in a curved channel and heat transfer at water-ice interface. Ishimiya, K., et al, [1987, p.294-301, eng] **41-3401**
- Porous medium physical model of frost layers. Meng, F., et al, [1987, p.584-593, eng] **41-3402**
- Ground ice origin from deuterium and heavy oxygen isotope content. Vasil'chuk, I.U.K., et al, [1985, p.66-68, rus] **41-3536**
- Experimental methods of determining water permeability of frozen soils. Lavrov, S.A., [1986, p.56-62, rus] **41-3588**
- Mechanism of basal ice layer formation. Tison, J.L., et al, [1987, p.47-50, eng] **41-3594**
- Long river crossings of overhead power lines. Elenbogen, G.N., et al, [1987, p.2-9, rus] **41-3611**
- Positive mesorelief forms as the result of ground ice formation. Belopukhova, E.B., et al, [1986, p.296-302, eng] **41-3620**
- JARE-25 oceanographic and marine biological data, Feb. 1984-Jan. 1985. Matsuda, O., et al, [1987, 21p., eng] **41-3667**
- Aerosol samplers used in size distribution study. Berezinskii, N.A., et al, [1986, p.55-63, rus] **41-3671**
- Ice-forming characteristics of giant aerosol particles in the atmosphere. El'mesov, M.S., [1986, p.238-248, rus] **41-3673**
- Investigation of ice-forming activity of aerosols of copper acetylacetonate in a supercooled two-phase flow. Kim, N.S., et al, [1986, p.21-24, eng] **41-3678**
- Raman scattering spectra at the water-ice phase transition. Glushkov, S.M., et al, [1986, p.836-839, rus] **41-3686**
- Subsurface ice-lens formation by the refreezing of taliks. Gravis, G.F., et al, [1972, p.73-79, rus] **41-3748**
- Ice particle evolution in the anvil of a severe thunderstorm. Heymsfield, A.J., [1986, p.2463-2478, eng] **41-4052**
- Numerical modeling of hailstorms and hailstone growth. Farley, R.D., et al, [1986, p.2014-2035, eng] **41-4059**
- Ice conditions during the *Mikhail Somov* cruise in a Soviet antarctic expedition. Proshutinskii, A.I.U., et al, [1986, p.75-78, rus] **41-4190**
- Ice process development. Romanov, A.A., [1986, p.28-35, rus] **41-4193**
- Dominant ice processes in summertime cumulus clouds in the Bethlehem area. Bruinjies, R.T., [1984, p.63-66, eng] **41-4372**
- Freezing of water and water-salt solutions around aluminum spheres. Chelliah, X., et al, [1987, p.437-446, eng] **41-4542**
- Helium-3 balance of the upper layers of the northwest Weddell Sea. Schlosser, P., et al, [1987, p.365-377, eng] **41-4602**
- Ice free reaches**  
See: Polynyas
- Ice friction**  
Friction of solids on ice. Huber, N.P., et al, [1986, 4p., eng] **41-2134**
- Ice flow over a bed of simple form. Meyssonier, J., [1983, 358p., fre] **41-3557**
- Ice gouging**  
See: Ice scoring
- Ice growth**  
Naled ice growth. Schohl, G.A., et al, [1986, 187p., eng] **41-80**
- Ice production in the northern Baltic proper. Stössel, A., [1985, p.261-284, eng] **41-485**
- Dating ice-wedge growth in subarctic peatlands following deforestation. Payette, S., et al, [1986, p.724-727, eng] **41-618**
- Theory and laboratory observations of naled ice growth. Schohl, G.A., et al, [1986, p.168-177, eng] **41-676**
- Calculating water level variations on freezing rivers. Agal'tseva, N.A., et al, [1986, p.48-51, rus] **41-700**
- Correlation of icing relationships with air-fil and rotorcraft icing data. Flemming, R.J., et al, [1986, p.737-743, eng] **41-802**
- Anchor ice and bottom-freezing in marine sedimentary environments. Reimnitz, E., et al, [1986, 21p., eng] **41-1209**
- Pliocene variations of Antarctic Convergence in southwest Atlantic. Ciesielski, P.F., et al, [1986, p.197-232, eng] **41-1264**
- Alignment of crystals in sea ice due to fluid motion. Langhorne, P.J., et al, [1986, p.197-214, eng] **41-1289**
- Aspects of ice lens growth in soils. Penner, E., [1986, p.91-100, eng] **41-1308**
- Sea ice measurements at Davis Station. Zhang, Q., [1986, p.143-148, chi] **41-1461**
- Properties of ice accreted in two-stage growth. Prodi, F., et al, [1986, p.1057-1080, eng] **41-1475**
- Ice accretions on fixed cylinders. Prodi, F., et al, [1986, p.1091-1109, eng] **41-1477**
- Condensation and agglomeration of cometary ice: the H<sub>2</sub>O/H<sub>2</sub>O ratio as tracer. Ip, W.-H., [1985, p.389-395, eng] **41-1713**
- Icing on walls of buried pipeline carrying a freezing liquid. Ovsianikov, V.M., [1986, p.212-219, eng] **41-1893**
- Formation of segregated ice and frost heave of clays. Zamolotchkova, S.A., [1986, p.127-136, rus] **41-2093**
- Passive microwave observations of sea ice growth. Grenfell, T.C., et al, [1986, p.826-831, eng] **41-2296**
- All-Union tutorial seminar on mathematical modeling in science and technology. Summaries, [1986, 333p., rus] **41-2381**
- Modeling the road icing process. Vorotnikov, V.I., et al, [1986, p.77-78, rus] **41-2383**
- Naled ice growth. Schohl, G.A., [1986, 205p., eng] **41-2589**
- Size dependence of natural aerosol for ice nucleation. Berezinskii, N.A., et al, [1986, p.28-32, rus] **41-2879**
- Problems of cloud physics. Voloshchuk, N.I., ed, [1986, 249p., rus] **41-3669**
- Microstructural characteristics of hailstone embryos. Tisov, M.I., et al, [1986, p.229-237, rus] **41-3672**
- Splashing a ship with collision-generated spray. Zakrzewski, W.P., [1987, p.65-83, eng] **41-4217**
- Ice growth in supercooled solutions of antifreeze glycoprotein. Harrison, K., et al, [1987, p.241-243, eng] **41-4228**
- Properties of ice accreted in a two stage growth. Prodi, F., et al, [1984, p.283-286, eng] **41-4401**
- Remote sensing of sea-ice growth and melt, Milne Ice Shelf, Canada. Jeffries, M.O., et al, [1987, p.145-150, eng] **41-4449**
- Ice heat flux**  
Seasonal ice extent on the northeast Newfoundland Shelf. Symonds, G., [1986, p.10718-10724, eng] **41-1011**
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingie, C.S., et al, [1987, p.249-285, eng] **41-3284**
- Heat budget of the Ross drainage basin. Oerlemans, J., [1987, p.287-292, eng] **41-3285**
- Ice heat sinks. Part 1: Vertical systems. Lunardini, V.J., [1986, 107p., eng] **41-3815**
- Ice heat sinks. Part 2: Horizontal systems. Lunardini, V.J., [1986, 104p., eng] **41-3818**
- Oceanic heat flux through a young sea-ice sheet. Ono, N., et al, [1986, p.37-43, jpn] **41-3878**
- Ice II-IX**  
See: High pressure ice
- Ice islands**  
Arctic sea ice and ice island movement, thickness and mechanical properties. Sackinger, W.M., et al, [1986, p.63-80, eng] **41-367**
- Spray-ice islands evaluated for Arctic-drilling structures. Juvkam-Wold, H.C., [1986, p.57-66, eng] **41-646**
- Ice islands as locations for arctic data collection. Sackinger, W.M., [1986, p.493-497, eng] **41-953**
- Physical oceanography near the North Pole. Pounder, E.R., [1986, p.11763-11773, eng] **41-1025**
- Use of ice-isles for protection of petroleum production platforms. Fangel, H., [1986, p.583-604, eng] **41-1119**
- Time and temperature effects in the performance of drilling ice platforms. Vinogradov, A.M., [1986, p.397-405, eng] **41-1607**
- Generation and trajectories of ice islands and multiyear ice flows. Sackinger, W.M., [1986, p.579-594, eng] **41-1620**
- Ice island construction. Cox, G.F.N., et al, [1983, 8 col., eng] **41-1777**
- Logistics support for Arctic scientific camps and drifting ice stations. Hobson, G.D., [1986, p.462-472, eng] **41-2039**
- Ice island lab shows petroleum potential. Jackson, R., [1986, p.1-4, eng] **41-2198**
- Glacial giants. History of origin, existence and deterioration of great glaciers. Balandin, R.K., [1986, 175p., rus] **41-2252**
- Properties of salt water ice as material for artificial islands construction. Mirzoev, D.A., et al, [1986, p.187-194, eng] **41-2274**
- PCSP's floating research station. [1987, p.6, eng] **41-2320**
- Applications of spray ice and rubble ice for Arctic offshore exploration. Goff, R.D., et al, [1987, p.1-7, eng] **41-2395**
- Drilling of a well from a sprayed floating ice platform Cape Allison C-47. Masterson, D.M., et al, [1987, p.9-16, eng] **41-2396**
- Viscoelasticity of flooded and spray ice using flatjacks. Spencer, P.A., et al, [1987, p.17-23, eng] **41-2397**
- Design and construction of the Mars ice island. Funegard, E.G., et al, [1987, p.25-32, eng] **41-2398**
- Eso's ice island shows how Arctic life goes on. Cottrill, A., [1987, p.42-48, eng] **41-2526**
- Ice island underfoot. Chilingarov, A., et al, [1986, 175p., rus] **41-3250**
- Grounded ice island—field and laboratory research interim report. Duthweiler, F.C., et al, [1986, 29p. + 3 appends., eng] **41-3422**
- Grounded ice island—field and laboratory research. Final report. Duthweiler, F.C., et al, [1976, 26p. + appends., eng] **41-3569**
- Ice jams**  
State of stress and thermal stresses in concretes and reinforced concretes of hydraulic structures. Karavaev, A.V., ed, [1985, 104p., rus] **41-428**
- Reinforced concrete plating for bridge reconstructions. Kvasha, V.G., et al, [1985, p.5-7, rus] **41-507**
- Field measurements under winter conditions. [1986, 323p., eng] **41-533**
- Program of collecting data of ice jams. Laasanen, O., [1986, p.39-43, eng] **41-536**
- Selection of optimal dimensions for hydraulic structures in ports. Piniagin, B.A., et al, [1986, p.77-81, rus] **41-1396**
- There are different types of ice. Berdnikov, D., [1986, p.46-47, rus] **41-1399**
- Hudson River ice management. Ferrick, M.G., et al, [1985, p.96-110, eng] **41-1488**
- Recommendations for site-specific observations of river ice. Prowse, T.D., [1985, p.111-125, eng] **41-1489**
- Hydrothermal decay of ice jams. Prowse, T.D., et al, [1985, p.272-276, eng] **41-1504**
- Role of Soviet academicians during WW2. Kotliakov, V.M., et al, [1986, p.19-25, rus] **41-1819**
- Record St. Clair River ice jam of 1984. Derecki, J.A., et al, [1986, p.1182-1194, eng] **41-2114**
- Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice. Tregub, G.A., et al, [1986, p.153-158, rus] **41-2169**
- River ice jams: theory, case studies, and applications. Gerard, R., [1987, p.241-255, eng] **41-2243**
- Ice research and problems of hydraulic construction in cold regions. Sparboom, U., [1984, p.1511-1513, ger] **41-2256**
- Ice jam characteristics, Liard-Mackenzie rivers confluence. Prowse, T.D., [1986, p.653-665, eng] **41-2476**
- Ice blasting. Tavrizov, V.M., [1986, 136p., rus] **41-2646**
- Corps of engineers seek ice solutions. Frankenstein, G.E., [1987, p.5-7, eng] **41-3140**
- Formulas for calculating mean water temperature at water intakes. Donovan, A.A., [1987, p.12-14, rus] **41-3936**
- Breakup of small rivers in the Subarctic. Woo, M.-K., et al, [1987, p.784-795, eng] **41-4081**
- Sub-drainage systems in cryogenic peat soils. Loginov, I.I., et al, [1984, p.51-52, rus] **41-4089**
- Ice lenses**  
Injection ice formation during subaqueous freezing of sediments. Gravis, G.F., [1986, p.108-112, rus] **41-116**
- Micromorphology of soil during periglacial processes. Van Vliet-Lanoë, B., [1985, p.15-20, eng] **41-370**
- Pipeline frost heave predictions using a 2-D thermal model. Nixon, J.F., [1986, p.67-82, eng] **41-644**
- Ice lensing in layered soils. Penner, E., [1986, p.334-340, eng] **41-1159**
- Aspects of ice lens growth in soils. Penner, E., [1986, p.91-100, eng] **41-1308**
- Morphology, genesis and temporal context of the Aishihik pingo (SW Yukon). Geurts, M.A., et al, [1985, p.291-298, fre] **41-2761**
- Waters in active layers and naled formation. Poznanin, V.L., [1986, p.142-147, rus] **41-2832**
- Subsurface ice-lens formation by the refreezing of taliks. Gravis, G.F., et al, [1972, p.73-79, rus] **41-3748**
- Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] **41-3771**
- Osmotic model for soil freezing. Horiguchi, K., [1987, p.13-22, eng] **41-4212**

## Ice lenses (cont.)

- Frost susceptibility of soil in relation to ice lens formation. Takeda, K., [1987, p.75-86, jpn] 41-4322
- Ice loads**
- State-of-the-art report on offshore concrete structures for the Arctic. [1985, 117p., eng] 41-82
- Natural hazards and research needs in coastal and ocean engineering. Nath, J.H., ed., [1984, 62p., eng] 41-83
- Research on arctic offshore structures at WARC. Joensuu, A., [1986, p.10-13, eng] 41-86
- Overview of project to measure ice forces at Adams Island. Frederking, R.M.W., et al., [1986, p.651-663, eng] 41-171
- Sea ice and the Fairway Rock icefoot. Kovacs, A., et al., [1985, p.25-32, eng] 41-337
- OMAE symposium on offshore and Arctic frontiers, 1st, 1986. [1986, 492p., eng] 41-354
- Stability of gravity platform foundation. Hoddinott, T., et al., [1986, p.127-135, eng] 41-358
- Caisson drilling and completion system. Hewlett, C., [1986, p.459-468, eng] 41-361
- Overview: Arctic and offshore research. Shoemaker, H.D., [1986, p.59-62, eng] 41-366
- Stresses in impervious screens induced by waves and adhered ice. Stabnikov, N.V., et al., [1985, p.33-38, rus] 41-432
- Antenna towers and antenna-supporting structures. [1981, 65p., eng] 41-493
- Ice conditions and offshore structures. [1986, p.31-32, eng] 41-568
- Research on transportation facilities in cold regions. Andersland, O.B., ed., [1986, 105p., eng] 41-639
- Ice forces on bridge piers. Haynes, F.D., [1986, p.83-101, eng] 41-645
- Behaviour of offshore structures; Proceedings. [1985, 1012p., eng] 41-665
- Recent developments in ice mechanics and ice loads. Croasdale, K.R., [1985, p.53-74, eng] 41-666
- Calculation of global ice force from wall-mounted pressure sensors. Myers, P.E., [1985, p.685-692, eng] 41-667
- Review of interaction of icebergs with offshore structures. Arunachalam, V.M., et al., [1985, p.693-704, eng] 41-668
- Predicting offshore structures behavior in arctic regions. Zaleski-Zamenhof, L.C., et al., [1985, p.705-716, eng] 41-669
- Response of offshore structures to bergy-bit and iceberg impacts. Arockiasamy, M., et al., [1985, p.951-961, eng] 41-671
- Ice effects on arctic offshore structures. Bruce, J.C., et al., [1983, p.14-15, eng] 41-788
- Offshore development in northern Canada and Alaska. Minion, R., comp., [1985, 83p., eng] 41-823
- Analysis of extreme ice loads measured on USCGC Polar Sea. Daley, C.G., et al., [1984, p.241-252, eng] 41-874
- Ice impact forces on icebreakers. Ghoneim, G.A.M., et al., [1984, p.253-282, eng] 41-875
- Global response of icebreakers ramming heavy ice. Vaughan, H., [1986, p.279-286, eng] 41-876
- Calculating wind loads on power line supports, allowing for icing. Kholodov, V.V., et al., [1986, p.66-68, rus] 41-885
- Artificial islands for arctic offshore exploration. Gerwick, B.C., Jr., [1984, p.467-476, eng] 41-894
- Field studies of mooring structures in the Far North. Kizim, A.G., [1986, p.82-85, rus] 41-904
- Ship operations in high latitudes. Lecourt, E.J., Jr., et al., [1986, p.175-182, eng] 41-931
- Arctic ice impact assessment for naval surface combatants. Devine, E.A., et al., [1986, p.297-347, eng] 41-939
- Northern technical research at the University of Oulu. Ukkola, A., [1986, p.113-118, eng] 41-968
- Determination of ice forces with centrifuge models. Clough, H.F., et al., [1986, p.49-60, eng] 41-1035
- Offshore and navigation conference, Helsinki, 1986; POLARTECH '86. [1986, 3 vols. + Suppl., eng] 41-1087
- Swedish offshore industry and some Arctic developments. Wassberg, R., [1986, p.41-56, eng] 41-1089
- On the frequency analysis of ice peaks. Javanainen, M., [1986, p.222-227, eng] 41-1098
- Field performance of an ice force panel for *in situ* and structural measurements. Witney, K.C., et al., [1986, p.241-261, eng] 41-1100
- Structural safety of semis in sub-Arctic waters. Andersson, L., et al., [1986, p.540-564, eng] 41-1117
- Ice-resistant offshore structures. Gershunov, E.M., [1986, p.605-623, eng] 41-1120
- Method for comparing and optimizing Arctic offshore structures. Korppoo, S., [1986, p.624-632, eng] 41-1121
- Development of composite members for Arctic offshore structures. Shioya, T., et al., [1986, p.660-677, eng] 41-1123
- Ice forces on model Arctic structures. Gowda, S.S., et al., [1986, p.693-706, eng] 41-1125
- Swedish investigations of ice-structure interaction in the Baltic. Jansson, J.E., [1986, p.707-711, eng] 41-1126
- Indentation tests of laboratory and field ice sheets. Kawasaki, T., et al., [1986, p.712-724, eng] 41-1127
- Ice design of multi-legged structures. Mizikos, J.P., [1986, p.735-748, eng] 41-1129
- Test cone project. Mänttinen, M., [1986, p.749-761, eng] 41-1130
- In-ice field measurements for an ice load estimation. Niemenlehto, J.J., et al., [1986, p.762-778, eng] 41-1131
- Machinery model propulsion tests in ice. Eskola, H., [1986, p.1001-1020, eng] 41-1143
- Safe speeds for navigation in ice. Tunik, A.L., [1986, p.1106-1124, eng] 41-1148
- Model of stresses in the Antarctic lithosphere induced by ice loads. Shemenda, A.I., et al., [1986, p.97-102, rus] 41-1166
- Weld properties for ultra-heavy steel plates for offshore structures. Homma, H., et al., [1984, p.53-59, eng] 41-1193
- Ice loads on offshore structures: the transition from creep to fracture. Sanderson, T.J.O., et al., [1986, p.157-161, eng] 41-1286
- Model tests on ice-rubble size and ship resistance in ice rubble. Ettema, R., et al., [1986, p.229-243, eng] 41-1291
- Ice forces on vertical cylindrical structures. Clough, H.F., et al., [1986, p.245-259, eng] 41-1292
- Scale effect in ice. Gershunov, E.M., [1986, p.277-284, eng] 41-1294
- Ice accretion measurement on a wire at Mt. Washington. McComber, P., et al., [1985, p.34-43, eng] 41-1482
- Computer interfacing of meteorological sensors in severe weather. Rancourt, K., et al., [1985, p.205-211, eng] 41-1496
- Protection of structures from pressure of moving sea ice. Ice tests performed at the "Kemi I" lighthouse. [1985, p.19, rus] 41-1514
- Ice loads on power lines in windy weather. Shurygin, V.P., et al., [1985, p.100-107, rus] 41-1545
- Design of transmission overhead lines for cold climate. Chantal, A., et al., [1986, p.14-22, fre] 41-1561
- Ice technology: proceedings of the 1st International conference. [1986, 594p., eng] 41-1578
- Requirements for the strength of offshore structures in the Arctic. Galakhov, I.N., et al., [1986, p.1-22, eng] 41-1579
- Response of floating ice beams and plates with partial flooding. Kerr, A.D., [1986, p.75-86, eng] 41-1584
- High speed borehole pressuremeter to measure the crushing strength of ice. Michel, B., et al., [1986, p.187-208, eng] 41-1592
- Ice load prediction during indentation. Shyam Sunder, S., [1986, p.297-309, eng] 41-1600
- Ice-breaking ships and operational loads. Vaughan, H., [1986, p.313-322, eng] 41-1601
- R-class icebreaker model experiment results. Newbury, G.S., et al., [1986, p.333-348, eng] 41-1603
- Ice force oscillator model for dynamic ice-structure interaction analysis. Xu, J., et al., [1986, p.391-196, eng] 41-1606
- Viscoelastic approach to the ice load evaluation. Kajaste-Rudnitski, J., et al., [1986, p.407-420, eng] 41-1608
- Comparison between the creep and the plastic analysis of ice forces by the FEM. Pulkkinen, E., [1986, p.421-430, eng] 41-1609
- Numerical modelling of ice-structure interaction. Chehayeb, F.S., et al., [1986, p.431-444, eng] 41-1610
- Offshore platform with ice-penetrating nose. Gerwick, B.C., Jr., et al., [1983, 8 col. + figs., eng] 41-1670
- Rules for the classification and construction of sea-going ships. [1986, 680p., eng] 41-1682
- Calculating pile foundations for hydraulic structures. Levachev, S.N., et al., [1986, 133p., rus] 41-1747
- Offshore Arctic structure. Weiss, R.T., [1983, 10 col., eng] 41-1771
- Artificial islands: a distinct alternative. Zadikoff, G., [1985, p.1056-1061, eng] 41-1915
- Formula for calculating ice and wind loads on wires. Gonchar, L.G., et al., [1986, p.37-38, rus] 41-1923
- Official specifications for ice roads and actual bearing capacity. Palosuo, E., [1984, p.18-19, fin] 41-1937
- Method and means for increasing the maneuverability of a ship in ice-covered waters. Lord, S.M., et al., [1983, 12 col., eng] 41-1981
- Current problems in arctic vessel research. Sukselainen, I.J., et al., [1986, p.41-65, eng] 41-2023
- Updating the Canadian ice class rules. Grinstead, J., [1986, p.66-104, eng] 41-2024
- Local and global strength aspects for icebreaking ships. Ghoneim, G.A.M., [1986, p.105-148, eng] 41-2025
- Improving polar transportation of Canada. Jeffrey, N.E., et al., [1986, p.149-168, eng] 41-2026
- Advances in icebreaker technology in West Germany. Schwarz, J., [1986, p.201-219, eng] 41-2028
- Proceedings. [1978, 4 vols. (2653p.), eng] 41-2120
- Caisson retained island drilling platform, Beaufort Sea. De Jong, J.J.A., et al., [1978, p.2111-2120, eng] 41-2126
- Model study of iceberg scouring in North Atlantic. Chari, T.R., et al., [1978, p.2319-2326, eng] 41-2128
- Project of the experimental Yamberg ice-core dam. Danielian, I.U.S., et al., [1986, p.183-189, rus] 41-2175
- Ice research and problems of hydraulic construction in cold regions. Sparboom, U., [1984, p.1511-1513, ger] 41-2256
- Offshore oil and gas production structures in freezing conditions. Issangulov, K.I., et al., [1986, p.160-166, eng] 41-2271
- Model test study of level ice forces on cylindrical multilegged structures. Evers, K.-U., et al., [1986, p.251-275, eng] 41-2278
- Tomorrow's technology in sub-Arctic and Arctic hydrocarbon exploration. Adams, P.F., [1986, p.312-316, eng] 41-2281
- MV Robert LeMeur ice/propeller interaction project: full-scale data. Laskow, V., et al., [1986, p.301-319, eng] 41-2285
- SSDC/MAT—an international operation. [1987, p.3-5, eng] 41-2319
- Ice loads on icebreaker *Sisu* in 1979-85. Kujala, P., et al., [1986, 52p. + append., eng] 41-2336
- International Offshore Mechanics and Arctic Engineering Symposium, 1987. [1987, 4 vols., eng] 41-2394
- Design and construction of the Mars ice island. Funegard, E.G., et al., [1987, p.25-32, eng] 41-2398
- Concrete island under ice loading. Templeton, J.S., III, et al., [1987, p.33-40, eng] 41-2399
- Design of gravity structures under iceberg loading. Cheang, L.C., et al., [1987, p.55-62, eng] 41-2402
- Tensile fracture model for ice. Sunder, S.S., et al., [1987, p.225-233, eng] 41-2425
- Explicit technique for calculating first year ice loads on structures. Walden, J.T., et al., [1987, p.267-272, eng] 41-2431
- Level ice indentation on a pile array. Mizikos, J.P., et al., [1987, p.273-279, eng] 41-2432
- Ice beam moving against a sloping structure. Sodhi, D.S., [1987, p.281-284, eng] 41-2433
- Minimizing iceberg impact loads on gravity base structures. Wishahy, M.A., [1987, p.291-298, eng] 41-2435
- Ice load distribution and ice pressure on offshore structure. Koma, N., et al., [1987, p.299-305, eng] 41-2436
- Ice impacts on semisubmersibles. Lindberg, K., et al., [1987, p.313-320, eng] 41-2438
- Observation of a model-scale semisubmersible in pack ice. Szeto, K., et al., [1987, p.341-350, eng] 41-2441
- Creep analysis of a first-year sea ice sheet. Phifer, E.H., [1987, p.351-356, eng] 41-2442
- Some statistical issues in the analysis of global ice loads. Salvaggio, M.A., et al., [1987, p.357-364, eng] 41-2443
- Flow of ice flow against a cylindrical structure. Vinogradov, O.G., et al., [1987, p.365-370, eng] 41-2444
- Probabilistic analysis of sea ice in North Bohai Bay. Liu, T., et al., [1987, p.387-391, eng] 41-2447
- Design criteria for Arctic shipping. Jordaan, I.J., et al., [1987, p.401-406, eng] 41-2449
- Determination of the ice load on elements of marine hydraulic structures. Gol'din, A.L., et al., [1987, p.417-420, eng] 41-2601
- Ice blasting. Tavrizov, V.M., [1986, 136p., rus] 41-2646
- Designing moorings built of fused enlarged blocks. Goncharov, V.V., et al., [1986, p.25-26, rus] 41-2788
- Advances in ice mechanics—1987. [1987, 49p., eng] 41-2929
- Advances in ice mechanics in the United Kingdom. Hallam, S.D., et al., [1987, p.1-5, eng] 41-2930
- Recent advances in ice mechanics in Canada. Sinha, N.K., et al., [1987, p.15-35, eng] 41-2932
- Advances in sea ice mechanics in the USA. Sodhi, D.S., et al., [1987, p.37-49, eng] 41-2933
- Icing and wind loading on a simulated power line. Govoni, J.W., et al., [1986, p.23-27, eng] 41-2967
- Canadian participation in the Polar Class trafficability program. Gien, I.F., et al., [1986, 63p., eng] 41-3028
- Mat foundations for offshore structures in Arctic regions. Yokel, F.Y., et al., [1987, 146p., eng] 41-3029
- Vertical ice forces on long straight walls. Christensen, F.T., [1987, p.215-218, eng] 41-3031
- Effect of oscillatory loads on the bearing capacity of floating ice covers. Kerr, A.D., et al., [1987, p.219-224, eng] 41-3032
- Arctic offshore research in VTT structural laboratories. Jumperman, P., [1985, p.51-53, eng] 41-3085
- Engineering aspects of ice gouging. Bea, R.G., [1986, p.18-28, eng] 41-3088
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al., [1987, 272p., rus] 41-3145
- Motion and impact of icebergs against offshore structures. [1986, 133p., eng] 41-3166
- Canadian Conference on Marine Geotechnical Engineering, 3rd, 1986, vol.3. [1986, p.852-1036 (Vol 3), eng] 41-3168
- Probabilities of ice, wind and temperature loads on electrical transmission lines. Gartsman, L.B., [1987, 200p., rus] 41-3245
- Ice-engineering: research after the rush. Ettema, R., et al., [1987, p.(A)22-(A)33, eng] 41-3353
- Model studies of ice interaction with ship rudders and steering systems. Menon, B., et al., [1986, 2 vols., eng] 41-3372

- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed. [1986, 120p., rus] 41-3385
- Working conditions of power transmissions of ice-navigating ships. Levin, B.M., et al. [1986, p.3-8, rus] 41-3386
- Performance of propulsion system elements in SA-15 ships in ice. Volosov, M.I., [1986, p.9-23, rus] 41-3387
- Modeling turbogear assemblies of ice-navigating ships. Basalygin, G.M., [1986, p.39-48, rus] 41-3389
- Natural shoal rubble pile study. Beaufort Sea, March-April 1979. McGonigal, D., et al. [1986, 36p. + figs., appends., eng] 41-3548
- Rubble field study, Issungnak, 1979-80. Vol.1. Executive summary report. McGonigal, D., [1983, 38p., eng] 41-3549
- Ice conditions around Issungnak, 1979-80. Data report. Shinde, S.B., [1981, 58p. + figs., appends., eng] 41-3551
- Issungnak rubble pile—field installation of ice stress panels—interim report. Vaudrey, K.D., [1980, 13p. + appends., eng] 41-3552
- Ice coring and testing, Issungnak 1980—results of NRC's data collection. Frederking, R., [1981, 5p. + figs., eng] 41-3554
- Ice forces on conical offshore structures. Kolymbas, D., [1987, p.217-231, eng] 41-3572
- Long river crossings of overhead power lines. Elenbogen, G.N., et al. [1987, p.2-9, rus] 41-3611
- Sea-ice indentation in creeping mode. Chehayeb, F.S., et al. [1987, p.965-983, eng] 41-3762
- Studying the effect of ground conditions on strength and stability of no-pilework bridge supports exposed to moving ice. Zhordochko, I.O., et al. [1987, p.101-104, rus] 41-3792
- Moving loads on sea ice. Squire, V.A., et al. [1987, p.569-575, eng] 41-3855
- Splashing a ship with collision-generated spray. Zakrzewski, W.P., [1987, p.65-83, eng] 41-4217
- Structure-ridge interaction. Gershunov, E.M., [1987, p.85-94, eng] 41-4218
- Structure-rubble field interaction. Gershunov, E.M., [1987, p.95-103, eng] 41-4219
- Atmospheric icing load measurements on a cable using the end tension. McComber, P., et al. [1987, p.131-141, eng] 41-4490
- Ice loads on the propulsion machinery of a tanker ship. Koskikivi, J., et al. [1985, 71p. + appends., eng] 41-4598
- Ice makers**
- Theory and practice of the spray-cone ice formation technique. Khodakov, V.G., et al. [1986, p.60-66, rus] 41-2154
- Scientific basis for the processes of upbuilding frozen water-ice foams on ground and their practical application. Levinskii, B.V., et al. [1986, p.66-72, rus] 41-2155
- Evaluating production efficiency of pneumohydraulic sprayers of snow-producing equipment. Ivanov, I.I., [1986, p.72-77, rus] 41-2156
- Ice mechanics**
- Northern Hemisphere sea ice variability: observed and simulated. Walsh, J.E., [1986, p.3-20, eng] 41-143
- Numerical study of sea ice and ocean circulation in the Arctic. Semtner, A.J., Jr., [1986, p.189-224, eng] 41-149
- Micromechanics approach to sea ice dynamics. Ostojia-Starzewski, M., et al. [1986, p.267-281, eng] 41-151
- Statistical kinematics for the sea ice discontinuum. Thorndike, A.S., [1986, p.282-295, eng] 41-152
- Data on ice mechanics from remote sensing, Beaufort Sea. Gower, J.F.R., et al. [1986, p.509-522, eng] 41-162
- Sea ice drift measurements using satellite-tracking beacons. Nazarenko, D.M., et al. [1986, p.583-597, eng] 41-168
- Dome-Canmar's operational ice-forecasting system for the Beaufort Sea. Steen, J.W., et al. [1986, p.615-650, eng] 41-170
- Overview of project to measure ice forces at Adams Island. Frederking, R.M.V., et al. [1986, p.651-663, eng] 41-171
- Yield curve of pack ice (1): physical meaning. Ito, H., [1986, p.105-109, eng] 41-355
- Gas hydrates and Arctic offshore research. [1986, 241p., eng] 41-365
- Arctic sea ice and ice island movement, thickness and mechanical properties. Sackinger, W.M., et al. [1986, p.61-80, eng] 41-367
- Ice avalanches and a landslide on Grosse Aletschgletscher. Alean, J., [1984, p.9-25, eng] 41-622
- Numerical experiments on large-scale glacial erosion. Oerlemans, J., [1984, p.107-126, eng] 41-629
- Behaviour of offshore structures; Proceedings. [1985, 1012p., eng] 41-665
- Recent developments in ice mechanics and ice loads. Crossdale, K.R., [1985, p.53-74, eng] 41-666
- Numerical study of plane ice-sheet flow. Hutter, K., et al. [1986, p.139-160, eng] 41-674
- Determination of particle paths using the finite-element method. Stolle, D.F.E., et al. [1986, p.219-223, eng] 41-681
- Rock avalanches in Huascarán Mountain, Peru. Körner, H., [1985, p.233-247, ger] 41-720
- Ice strength index for model towing tanks. Baker, D.N., [1986, 40p. + appends., 12p., eng] 41-964
- On the scale effect in ice mechanics. Bercha, F.G., [1977, p.65-66, eng] 41-975
- Ice engineering research activities on the Japanese coast of Okhotsk Sea. Oshima, M., [1986, p.15-29, eng] 41-1088
- Mechanical and dynamic properties and behaviour of polycrystalline ice. Youssef, H., [1986, p.283-298, eng] 41-1102
- Behaviour of ice masses in waves. Kokkinowrachos, K., et al. [1986, p.340-357, eng] 41-1105
- Ice-ocean modelling in the East Greenland area. Rasmussen, E.B., et al. [1986, p.380-398, eng] 41-1108
- In-ice field measurements for an ice load estimation. Niemenlehto, J.J., et al. [1986, p.763-778, eng] 41-1131
- Ice cover deformations at Adams Island, winter 1982-1983. Sayed, M., et al. [1986, p.346-354, eng] 41-1160
- Southeastward ice flow in central Quebec. Bouchard, M.A., et al. [1985, p.1536-1541, eng] 41-1239
- EG/AD/S: a new type of model ice for refrigerated towing tanks. Timco, G.W., [1986, p.175-195, eng] 41-1238
- Mechanical properties of atmospheric ice. Druetz, J., et al. [1986, p.67-74, eng] 41-1305
- Nonlinear constitutive model for ice. Szyzskowski, W., et al. [1985, p.307-321, eng] 41-1357
- Ice transport through the Fram Strait. Vinje, T., et al. [1986, 39p., eng] 41-1574
- Mechanical behavior of sea ice. Sunder, S.S., [1986, p.87-102, eng] 41-1585
- Centrifugal modelling of sea ice. Lovell, M.S., et al. [1986, p.105-113, eng] 41-1586
- East Greenland Current—ice studies. Tryde, P., [1986, p.129-136, eng] 41-1588
- Rheological model for ice dynamics. Vinogradov, O., et al. [1986, p.137-146, eng] 41-1589
- Operation of ships in the Arctic. Köhler, P.E., et al. [1986, p.553-562, eng] 41-1618
- Generation and trajectories of ice islands and multiyear ice flows. Sackinger, W.M., [1986, p.579-594, eng] 41-1620
- Changes in forms of mountain glaciers in the Polar Urals. Tüftlin, A.S., et al. [1986, p.96-99, rus] 41-1646
- Offshore Arctic structure. Weiss, R.T., [1983, 10 col., eng] 41-1771
- Outer Continental Shelf Environmental Assessment Program: Final reports of principal investigators, Vol.39. [1986, 360p., eng] 41-1785
- Bergy-bit motion due to wind, wave, current and Coriolis forces. Doyle, R., et al. [1984, p.182-198, eng] 41-1959
- Safe speed of ships in Arctic waters. Koehler, P.E., et al. [1986, p.734-746, eng] 41-2055
- Ice management procedures for specialized drilling structures. Kimmerly, P.C., et al. [1986, p.764-791, eng] 41-2057
- Proceedings. [1978, 4 vols. (2653p.), eng] 41-2120
- Behavior of the Bouchard No.65 oil spill in the ice-covered waters of Buzzards Bay. Deslauriers, P.C., et al. [1978, p.267-276, eng] 41-2124
- Model test study of level ice forces on cylindrical multilegged structures. Evers, K.U., et al. [1986, p.251-275, eng] 41-2278
- Mineralogical distribution of the sand fraction due to ice drifting. Drapeau, G., et al. [1985, p.51-56, fre] 41-2286
- Modelling the mechanical properties of ice. Szyzskowski, W., et al. [1987, p.159-165, eng] 41-2417
- Microstructure and thermodynamics of sea ice. Brown, R.L., [1987, p.209-213, eng] 41-2423
- Mechanical properties of antarctic sea ice (II). Urabe, N., et al. [1987, p.239-244, eng] 41-2427
- Determination of mechanical properties of ice by quantum statistical approach and experiments. Schwarz, J., et al. [1987, p.245-252, eng] 41-2428
- Icebreaking tanker moored to an offshore structure. Machemehl, J.L., [1987, p.329-339, eng] 41-2440
- Flow of ice floe against a cylindrical structure. Vinogradov, O.G., et al. [1987, p.365-370, eng] 41-2444
- Triaxial testing of first-year sea ice. Richter-Menge, J.A., et al. [1986, 41p., eng] 41-2547
- Role of sea ice motion in ice penetration. Denner, W.W., et al. [1986, p.135-153, eng] 41-2656
- On the profile properties of undeformed first-year sea ice. Cox, G.F.N., et al. [1986, p.257-330, eng] 41-2663
- Advances in ice mechanics—1987. [1987, 49p., eng] 41-2929
- Advances in ice mechanics in the United Kingdom. Hallam, S.D., et al. [1987, p.1-5, eng] 41-2930
- Advance in ice mechanics in Finland. Maattanen, M., [1987, p.7-14, eng] 41-2931
- Recent advances in ice mechanics in Canada. Sinha, N.K., et al. [1987, p.15-35, eng] 41-2932
- Advances in sea ice mechanics in the USA. Sodhi, D.S., et al. [1987, p.37-49, eng] 41-2933
- Some experimental findings regarding the mechanical properties of sheet ice. Epifanov, V.P., [1985, p.178-187, eng] 41-2971
- Growth, structure, and properties of sea ice. Weeks, W.F., et al. [1986, p.9-164, eng] 41-2987
- Mechanical behavior of sea ice. Mellor, M., [1986, p.165-281, eng] 41-2988
- Kinematics of sea ice. Thorndike, A.S., [1986, p.489-549, eng] 41-2993
- Ice dynamics. Hibler, W.D., III, [1986, p.577-640, eng] 41-2995
- Accuracy of surface geostrophic wind forecasts in the central Arctic. Moritz, R.E., [1986, p.1135-1161, eng] 41-3004
- Short term motion analysis of icebergs in linear waves. Arunachalam, V.M., et al. [1987, p.247-258, eng] 41-3036
- Kinematics of marginal ice: MIZEX 83. Ito, H., [1986, p.7-16, eng] 41-3034
- On estimating ice stress from MIZEX 83 ice deformation and current measurements. Leppäranta, M., et al. [1986, p.17-19, eng] 41-3035
- Ice/air feedback mechanism for the migration of the marginal ice zone. Chu, P.C., [1986, p.54-64, eng] 41-3039
- Dynamics of Iceberg Grounding and Scouring (DIGS) experiment. Lewis, C.F.M., [1986, p.129-131, eng] 41-3101
- Iceberg dynamics of the DIGS experiment. Lever, J., [1986, p.138-142, eng] 41-3103
- Geotechnical aspects of the DIGS experiment. Moran, K., [1986, p.143-147, eng] 41-3104
- Corps of engineers seek ice solutions. Frankenstein, G.E., [1987, p.5-7, eng] 41-3140
- Motion and impact of icebergs against offshore structures. [1986, 133p., eng] 41-3166
- Resistance of ice models in a test channel. Baker, D.N., [1986, 15p., fre] 41-3244
- Verification tests for a stiff inclusion stress sensor. Cox, G.F.N., et al. [1987, p.81-88, eng] 41-3301
- Spaceborne SAR and sea ice: a status report. Weeks, W.F., [1983, p.113-115, eng] 41-3347
- Engineering mechanics—6th conference. Abstracts. [1987, 336p., eng] 41-3352
- Ice features and movement north of Ellesmere Island, Canada. Nordlund, O.P., et al. [1987, p.32-43, eng] 41-3371
- Analysis of NavSat buoy data from Beaufort Sea, 1980—detailed results. [1981, 236p., eng] 41-3475
- Rubble field study, Issungnak, 1979-80. Vol.1. Executive summary report. McGonigal, D., [1983, 38p., eng] 41-3549
- Pack ice/rubble field interaction study, Issungnak 1980. [1981, 88p. + appends., eng] 41-3550
- Ice conditions around Issungnak, 1979-80. Data report. Shinde, S.B., [1981, 58p. + figs., appends., eng] 41-3551
- Ice flow over a bed of simple form. Meyssonier, J., [1983, 358p., fre] 41-3557
- Ice forces on conical offshore structures. Kolymbas, D., [1987, p.217-231, eng] 41-3572
- Research in the tunnel of Urumqi Glacier No.1. Huang, M., et al. [1987, p.99-104, eng] 41-3602
- Thermomechanical balances of ice sheet flows. Morland, L.W., [1984, p.237-266, eng] 41-3791
- Greenland ice-sheet margin—a mine of ice for paleo-environmental studies. Reeh, N., et al. [1987, p.229-234, eng] 41-3794
- Dynamical properties of ice surfaces studied by nuclear magnetic resonance. Mizuno, Y., et al. [1986, p.1-10, jpn] 41-3874
- Ice flow history and glacial dispersal in the Labrador Trough. Klassen, R.A., et al. [1987, p.61-71, eng] 41-4009
- Model of the ice age cycle. Hyde, W.T., et al. [1987, p.1351-1374, eng] 41-4053
- Sea ice structure and mechanical properties. Richter-Menge, J.A., et al. [1987, 30p., eng] 41-4143
- Surface stress, heat flux and drag coefficient in the ice edge zone, 1983. Fairall, C.W., et al. [1987, p.6921-6932, eng] 41-4248
- Effect of ice conditions on the drag coefficient in the Greenland Sea ice edge zone. Guest, P.S., et al. [1987, p.6943-6954, eng] 41-4250
- Dynamics and thermodynamics of the ice-ocean system in the ice edge zone, Greenland Sea. McPhee, M.G., et al. [1987, p.7017-7031, eng] 41-4257
- Size of wind-driven coastal polynyas. Pease, C.H., [1987, p.7049-7059, eng] 41-4260
- Mesoscale sea ice deformation in the East Greenland marginal ice zone. Leppäranta, M., et al. [1987, p.7060-7070, eng] 41-4261
- Ice floe collisions in the Greenland Sea, 1984. Martin, S., et al. [1987, p.7071-7084, eng] 41-4262
- Role of floe collisions in sea ice rheology. Shen, H.H., et al. [1987, p.7085-7096, eng] 41-4263
- Northward flow in the Bering and Chukchi seas. Overland, J.E., et al. [1987, p.7097-7105, eng] 41-4264
- Spring blooming in Bering Sea during the ice edge retreat, 1980. Maynard, N.G., et al. [1987, p.7127-7139, eng] 41-4266

## Ice mechanics (cont.)

- On the relationship between atmospheric circulation and the fluctuations in the sea ice extents of the Bering and Okhotsk seas. Cavalieri, D.J., et al, 1987, p.7141-7162, eng 41-4267
- Beaufort-Chukchi ice margin data from Seasat: ice motion. Carney, F., et al, 1987, p.7163-7172, eng 41-4268
- Winter Ice Experiment Beaufort Sea (WIEBS)—data collection. Neralla, V.R., et al, 1987, p.203-212, eng 41-4274
- Constitutive law for sea ice and some applications. Hakkinen, S., 1987, p.81-90, eng 41-4275
- Wave ogives. Waddington, E.D., 1986, p.325-334, eng 41-4284
- Flow law for vertical velocity and age-depth profiles in polar ice. Wolff, E.W., et al, 1986, p.366-370, eng 41-4290
- Motion of sub-freezing ice past particles. Wolde, J.S., 1986, p.41-4296, eng 41-4296
- Morphology and kinematics of Arctic sea ice. Lee, M., et al, 1987, p.92-96, eng 41-4442
- Comparison of observed and modeled ice motion in the Arctic Ocean. Zwally, H.J., et al, 1987, p.136-144, eng 41-4443
- Report of the International Ice Patrol in the North Atlantic. 1985, 90p., eng 41-4576
- Ice motion in Lake Erie. Campbell, J.E., et al, 1987, 22p., eng 41-4577
- Ice melting**
- On the melting of graupel and frozen raindrops. Johanson, D.B., et al, 1982, p.384-387, eng 41-41
- Melting of spherical ice particles. Rasmussen, R.M., et al, 1982, p.388-391, eng 41-42
- Buried glacier ice and related lithomorphogenic problems. Karukkipi, R.I.A., 1986, p.78-83, rus 41-109
- Countermeasures against damage by heavy snowfall in Kinki Nippon railways. Fukuda, K., 1985, p.19-20, jpn 41-181
- On free convection melting of a solid immersed in a hot dissimilar fluid. Chen, M.M., et al, 1986, p.1087-1093, eng 41-393
- Surface features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al, 1986, p.168-170, eng 41-411
- Melting process in ice-air composite materials. Aoki, K., et al, 1986, p.2138-2144, eng 41-532
- Numerical simulation of melting of ice around a horizontal cylinder. Ho, C.J., et al, 1986, p.1359-1369, eng 41-564
- Melting of a solid cylinder pressed against a heated wall. Martin, H., et al, 1986, p.1407-1415, eng 41-566
- Melting history of Antarctica during the past 60,000 years. Labeyrie, L.D., et al, 1986, p.701-706, eng 41-616
- Snow and ice. Morris, E.M., 1985, p.153-182, eng 41-648
- Antarctic iceberg distribution and dissolution. Hamley, T.C., et al, 1986, p.242-251, eng 41-685
- Role of debris cover in the thermal physics of glaciers. Bozhinskiy, A.N., et al, 1986, p.255-266, eng 41-687
- Organism losses during sea ice melting. Garrison, D.L., et al, 1986, p.237-239, eng 41-1016
- Ice pumps and their rates. Lewis, E.L., et al, 1986, p.11756-11762, eng 41-1024
- Sea ice measurements at Davis Station. Zhang, Q., 1986, p.143-148, chi 41-1461
- Hydrothermal decay of ice jams. Prowse, T.D., et al, 1985, p.272-276, eng 41-1504
- Accretion of icy satellites of Jupiter and Saturn. Ahrens, T.J., et al, 1985, p.631-654, eng 41-1728
- Turbulent free convection on a large vertical icewall in seawater. Gominho, L.C., et al, 1984, 7p., eng 41-1787
- Transformation prior to melting in ammonia, organic compounds and ice. Pruzan, P., et al, 1986, p.949-961, eng 41-1864
- Icing on walls of buried pipeline carrying a freezing liquid. Ovsianikov, V.M., 1986, p.212-219, eng 41-1893
- Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice. Tregub, G.A., et al, 1986, p.153-158, rus 41-2169
- Convective flows of cold water over a flat surface. Jang, J.Y., et al, 1987, p.85-89, eng 41-2406
- High-voltage network for areas of increased intensity of icing. Genrikh, G.A., et al, 1976, 38 col. + 22 sheets, eng 41-2497
- Melting of frozen porous media contained in a cylindrical capsule. Weaver, J.A., et al, 1986, p.1943-1951, eng 41-2524
- Investigation of melting ice in an isothermal horizontal cylinder. Riviere, P., et al, 1987, p.155-165, eng 41-2881
- Formation and melting of a vertical ice slab in an enclosure. Sorour, M.M., et al, 1987, p.167-177, eng 41-2882
- Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al, 1986, p.21-23, eng 41-2941
- Climatic warming and basal melting of large ice sheets. Saari, M.R., et al, 1987, p.33-36, eng 41-2947
- MIZEX—a program for mesoscale air-ice-ocean interaction experiments in Arctic marginal ice zones. MIZEX bulletin 7, 1986, 88p., eng 41-3052
- Note on estimating melt rate in the MIZ. McFhee, M.G., 1986, p.1-6, eng 41-3053
- Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., 1983, 274p., eng 41-3073
- Chemical solutions to the chemical problem. Minsk, L.D., 1985, p.238-244, eng 41-3194
- On the oceanic circulation near a shelf-ice edge. Van H-rjat, G.J.F., 1987, p.37-55, eng 41-3273
- Some aspects of the flow of the Ronne Ice Shelf. Drake, C.S.M., 1987, p.75-98, eng 41-3275
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, 1987, p.293-320, eng 41-3286
- Modelling the response of the West Antarctic Ice Sheet to a climatic warming. Budd, W.F., et al, 1987, p.321-358, eng 41-3287
- Prediction of freeze-up time, freezing and melting. Dilley, J.F., et al, 1986, p.1727-1732, eng 41-3291
- Onset of natural convection and heat transfer in a layer of water below melting ice. Englberger, W., et al, 1986, p.1799-1804, eng 41-3298
- Direct contact melting heat transfer on a heated surface. Saito, A., et al, 1986, p.1805-1810, eng 41-3299
- Microwave sea-ice signatures near the onset of melt. Livingstone, C.E., et al, 1987, p.174-187, eng 41-3317
- Liquid-solid phase change heat transfer. Masiulaniec, K.C., et al, 1985, p.194-205, eng 41-3339
- Laboratory investigation of the melting of ice by induced convection. Bogorodskiy, V.V., et al, 1986, p.94-96, eng 41-3682
- Experiments on melting of unfixed ice in a horizontal cylindrical capsule. Webb, B.W., et al, 1987, p.454-459, eng 41-3756
- Melting of ice layer by effect of temperature and aqua-solvent. Sugawara, M., et al, 1987, p.227-232, eng 41-3963
- Melting temperature of ice at positive and negative pressures. Henderson, S.J., et al, 1987, p.3069-3072, eng 41-4126
- Establishing compressibility values of thawing permafrost. Maksimenko, E.S., et al, 1987, p.248-251, eng 41-4166
- Amount of ice and heat required for its melting in the Far-Eastern seas of the USSR. Iakunin, L.P., 1986, p.93-96, rus 41-4201
- Photogrammetric observations of the lateral melt of sea ice floes. Hall, R.T., et al, 1987, p.7045-7048, eng 41-4259
- Recent advance of the Ross Ice Shelf, Antarctica. Jacobs, S.S., et al, 1986, p.464-474, eng 41-4302
- Nomographs for meltwater determination. Ambach, W., et al, 1986, p.181-189, eng 41-4357
- Nomographs for the determination of meltwater from snow and ice surfaces. Ambach, W., 1986, p.7-15, eng 41-4358
- Hail to rain conversion through melting. List, R., et al, 1984, p.275-278, eng 41-4399
- Ice metal friction**
- See: Metal ice friction
- Ice microstructure**
- Configurational entropy of partially ordered ice. Howe, R., et al, 1987, p.6443-6445, eng 41-4180
- Rheological properties of ice loaded with microparticles. Fisher, D.A., et al, 1986, p.501-510, eng 41-4305
- Crystallography of Patterned Lake, Framnes Mountains. Chambers, J.L.C., et al, 1986, p.520-526, eng 41-4307
- On the microstructure and ice water content of high clouds. Kosarev, A.L., et al, 1984, p.73-76, eng 41-4375
- Microphysical structures of hailstones observed on the Xizang plateau. Guo, E., 1984, p.91-94, eng 41-4377
- Ice models**
- Canadian East Coast Workshop on Sea Ice, 1986, 668p., eng 41-142
- Numerical study of sea ice and ocean circulation in the Arctic. Semtner, A.J., Jr., 1986, p.189-224, eng 41-149
- Coupled ice-mixed layer model for the Greenland Sea. Houssais, M.N., 1986, p.225-260, eng 41-150
- Lattice vibrations and infrared absorption of ice Ih. Marchi, M., et al, 1986, p.2414-2418, eng 41-395
- Elasticity and viscosity of floating, model ice-cover. Iakunin, A.E., 1986, p.124-128, rus 41-435
- Physics of ice sheets and underlying bedrock. Birchfield, G.E., et al, 1985, p.11294-11302, eng 41-494
- Ice strength index for model towing tanks. Baker, D.N., 1986, 40p. + appendix, 12p., eng 41-964
- Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al, 1986, p.175-196, eng 41-1095
- Ice-ocean modelling in the East Greenland area. Rasmussen, E.B., et al, 1986, p.380-398, eng 41-1108
- Glacier thickness and velocity measurements. Sheremet'ev, A.N., 1986, p.127-132, rus 41-1269
- Added mass and damping coefficient for certain 'realistic' iceberg models. Bass, D.W., et al, 1986, p.163-174, eng 41-1287
- EGAD/S: a new type of model ice for refrigerated towing tanks. Tinoco, G.W., 1986, p.175-195, eng 41-1288
- Physical model lag in ice engineering. Ettema, R., 1986, p.57-65, eng 41-1304
- Nonlinear constitutive model for ice. Szykowski, W., et al, 1985, p.307-321, eng 41-1357
- Centrifugal modelling of sea ice. Lovell, M.S., et al, 1986, p.105-113, eng 41-1586
- Rheological model for ice dynamics. Vinogradov, O., et al, 1986, p.137-146, eng 41-1589
- Sea ice modelling in the East Greenland area. Larsen, J., et al, 1986, p.147-156, eng 41-1590
- Sea ice pressure ridges. Bishop, G.C., et al, 1986, p.157-184, eng 41-1591
- Composition and structure of the comet nucleus. Klinger, J., 1985, p.407-417, eng 41-1715
- Model for an icy halo in comets. Crifo, J.F., et al, 1985, p.429-442, eng 41-1717
- Glacio-geophysical implications of NNSS positioning at Showa Station. Shibuya, K., 1986, p.327-346, eng 41-2212
- Ice-seawater turbulent boundary layer interaction with melting or freezing. Mellor, G.L., et al, 1986, p.1829-1846, eng 41-2219
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskiy, M.I.A., et al, 1986, 133p., rus 41-2253
- Model test study of level ice forces on cylindrical multilegged structures. Evers, K.-U., et al, 1986, p.251-275, eng 41-2278
- Model calculation of glacial evolution. Krass, M.S., 1984, p.86-103, rus 41-2357
- Constitutive modeling of ice. Vinogradov, A.M., 1987, p.181-188, eng 41-2420
- Electromagnetic properties of sea ice. Kovacs, A., et al, 1986, p.57-133, eng 41-2655
- Forecasting ice thickness and concentration in the Arctic. Preller, R.H., et al, 1986, p.155-164, eng 41-2657
- Long term climatic changes indicated by crystal growth in polar ice. Petit, J.R., et al, 1987, p.62-64, eng 41-2750
- Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., 1983, 274p., eng 41-3073
- Resistance of ice models in a test channel. Baker, L.N., 1986, 15p., fre 41-3244
- Paleoclimatic constraints on ice shelves in the Greenland and Norwegian seas. Lindstrom, D.R., et al, 1986, p.313-337, eng 41-3248
- Unconfined ice-shelf flow. Morland, L.W., 1987, p.116, eng 41-3276
- Plane and radial ice-shelf flow with prescribed temperature profile. Morland, L.W., et al, 1987, p.117-140, eng 41-3277
- Ice-shelf backpressure: form drag versus dynamic drag. MacAyeal, D.R., 1987, p.141-160, eng 41-3278
- On the flow within the transition zone between ice sheet and ice shelf. Herterich, K., 1987, p.185-202, eng 41-3281
- Finite-element method applied to a time-dependent flowband model. Fastook, J.L., 1987, p.203-221, eng 41-3282
- Longitudinal stresses and basal sliding: a comparative study. Van der Veen, C.J., 1987, p.223-248, eng 41-3283
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingie, C.S., et al, 1987, p.249-285, eng 41-3284
- Heat budget of the Ross drainage basin. Oerlemans, J., 1987, p.287-292, eng 41-3285
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, 1987, p.293-320, eng 41-3286
- Modelling the response of the West Antarctic Ice Sheet to a climatic warming. Budd, W.F., et al, 1987, p.321-358, eng 41-3287
- Thermodynamic model of first year sea ice. Gabison, R., 1987, p.105-119, eng 41-3603
- Random discontinuous model of sea ice motion. Thorndike, A.S., 1987, p.6515-6520, eng 41-3642
- Laboratory investigation of the melting of ice by induced convection. Bogorodskiy, V.V., et al, 1986, p.94-96, eng 41-3682
- Winter Ice Experiment Beaufort Sea (WIEBS)—data collection. Neralla, V.R., et al, 1987, p.203-212, eng 41-4274
- Constitutive law for sea ice and some applications. Hakkinen, S., 1987, p.81-90, eng 41-4275
- Ice calving, carbon dioxide and control of ice ages. Lockwood, J.G., 1985, p.89-96, eng 41-4276
- Simulation of Erebus Glacier Tongue thermal regime. Stolle, D.F.E., et al, 1986, p.530-534, eng 41-4309
- Ice mounds**
- See: Frost mounds
- Ice navigation**
- New offshore ship types for the frontier areas. 1986, p.22-24, eng 41-88
- Wärtsilä Arctic Pusher System. Segercrantz, H., 1986, p.26-28, eng 41-89
- Finnlines fleet for year-round transportation. 1986, p.45-47, eng 41-91



- Ice cover charts, upper St. Lawrence River, 1971-81. Vol. 1 (Pt. B). Shen, H.T., et al, [1982, p.249-505, eng] 41-174
- Deployment and operation of the ice stations for the FRAM program. Heiberg, A., et al, [1985, p.429-432, eng] 41-222
- R/V *Polar Duke*—a new vessel for antarctic research support. Inderbitzen, A.L., et al, [1985, p.437-440, eng] 41-224
- Ice navigation studies in the Alaskan Arctic using POLAR class icebreakers. Brigham, L.W., et al, [1985, p.441-447, eng] 41-225
- Evolution and potential of the Arctic submarine. McLaren, A.S., [1985, p.448-453, eng] 41-226
- Arctic runs of the Baltics. Kotliarski, M., [1986, p.12-13, rus] 41-435
- Icebreakers: fuel economy and safe navigation. Bereznii, V., [1986, p.35-36, rus] 41-436
- Determining the effectiveness of a navigable ice boom. Perham, R.E., [1985, 28p., eng] 41-446
- Compendium of Arctic environmental information. Welch, J.P., et al, [1986, 142p., eng] 41-483
- Ice production in the northern Baltic proper. Stössel, A., [1985, p.261-284, eng] 41-485
- Forecasts and the efficiency of fleet performance. Collection of scientific papers. Shchelkanov, A.G., ed, [1985, 105p., rus] 41-487
- Determining the economic effectiveness of investments in the Arctic Fleet. Dolban, V.A., [1985, p.6-10, rus] 41-488
- Computerized simulation of fleet performance in the Arctic. Batakh, I.U.M., et al, [1985, p.48-53, rus] 41-489
- SA-15 ships for ice navigation in northern rivers. Varaksin, K.N., et al, [1985, p.54-56, rus] 41-490
- Efficiency of small Arctic barges. Vysotskaia, N.A., [1985, p.61-62, rus] 41-491
- Using barge-carrier systems in Arctic transportation. Pavskii, E.I., [1985, p.62-67, rus] 41-492
- Architectural and structural type of the 1986-1995 models of refueling tankers. Morelnia, F.A., et al, [1984, p.19-29, rus] 41-541
- Ice navigation properties of timber-transporting ships. Sokolov, L.G., et al, [1984, p.29-37, rus] 41-542
- Naval power plants and equipment. Panin, I.U.I., ed, [1984, 153p., rus] 41-554
- Interactions of nuclear ship's propelling system with large ice floes. Basalygin, G.M., [1984, p.52-60, rus] 41-555
- Guidance systems for ships operating in ice. Likhachev, A.V., [1984, p.36-42, rus] 41-558
- Guide to marine transportation information sources in Canada. Joba, J.C., [1985, 308p., eng] 41-562
- Arctic shipping. [1986, p.17-29, eng] 41-567
- M.V. *Arctic*—spring 1986 performance trials voyage report. Pearce, T.H., et al, [1986, 30p., eng] 41-695
- Northern Oil and Gas Action Program (NOGAP) bibliography, Volume 1. [1986, 51p., eng] 41-696
- Arctic/cold weather operations symposium, 1985; proceedings. [1986, 542p., eng] 41-924
- Overview of the Cold Weather Program. Kordenbrock, J.U., [1986, p.61-82, eng] 41-925
- Arctic environment. Reahew, J.W., [1986, p.83-100, eng] 41-926
- Seaway performance improvement program. Bubeck, R.B., [1986, p.101-122, eng] 41-927
- Ship operations in high latitudes. Lecourt, E.J., Jr., et al, [1986, p.175-182, eng] 41-931
- Arctic ice impact assessment for naval surface combatants. Devine, E.A., et al, [1986, p.297-347, eng] 41-939
- Arctic surface warfare hovercraft. Schuler, J.L., [1986, p.355-377, eng] 41-941
- NAWS—a hull stress monitoring system for arctic ships. Kendrick, A., et al, [1986, p.407-419, eng] 41-943
- Offshore and navigation conference, Helsinki, 1986; POLARTECH '86. [1986, 3 vols. + Suppls., eng] 41-1087
- Ice information systems for marine operations. Leppäranta, M., [1986, p.57-70, eng] 41-1090
- Satellites for industrial development in Arctic regions. Taaholt, J., [1986, p.71-82, eng] 41-1091
- Ice management for year-round operating marine terminals. Tsinker, G.P., [1986, p.409-435, eng] 41-1110
- Machinery model propulsion tests in ice. Eskola, H., [1986, p.1001-1020, eng] 41-1143
- Brash ice effects on ship operations. Forsman, B., et al, [1986, p.1021-1038, eng] 41-1144
- Operational experience with the new-type Baltic icebreaker "Oslo". Jansson, J.E., et al, [1986, p.1039-1060, eng] 41-1145
- Hydrodynamic loads during ice-clogging of a propeller. Lindroos, H., et al, [1986, p.1061-1092, eng] 41-1146
- Safe speeds for navigation in ice. Tunik, A.L., [1986, p.1106-1124, eng] 41-1148
- Model tests on ice-rubble size and ship resistance in ice rubble. Ettema, R., et al, [1986, p.229-243, eng] 41-1291
- Offshore outlook: the American Arctic. Jahns, H.O., [1985, p.76-82, eng] 41-1328
- Geography of marine navigation. Nedotchi, G.L., [1985, 263p., rus] 41-1353
- There are different types of ice. Berdnikov, D., [1986, p.46-47, rus] 41-1399
- Year-round shipping routes in the Canadian Arctic. Dey, B., [1985, p.237-242, eng] 41-1499
- "RAEX POLAR" brand of steel for icebreaker construction. [1985, p.9, rus] 41-1513
- Ship building technology based on research data. Sukselainen, J., [1985, p.36-39, rus] 41-1517
- Beginning the construction of the atomic icebreaker *Taymyr*. Juurmaa, K., [1985, p.44-45, rus] 41-1518
- Diesel engines designed for navigation in heavy ice. [1985, p.70-73, rus] 41-1519
- Tugboat-barge equipped for ice navigation. [1985, p.80-81, rus] 41-1520
- Finland to build ice-breaking cargo ships and snow-going vehicles. [1985, p.100-102, rus] 41-1521
- Valmet Co. program for ice testing of propeller nozzles. [1985, p.108-109, rus] 41-1523
- Nestship vessels feel at home in ice conditions. [1985, p.120-121, rus] 41-1524
- Research for commercial Arctic marine transportation. Seibold, F., [1985, p.28-35, eng] 41-1557
- Providing controllability for an icebreaker running astern in heavy ice. Pershita, R.I.A., [1986, p.8-10, rus] 41-1576
- Ice technology: proceedings of the 1st International conference. [1986, 594p., eng] 41-1578
- Requirements for the strength of offshore structures in the Arctic. Galakhov, I.N., et al, [1986, p.1-22, eng] 41-1579
- Problems in physical modelling of the propulsion and maneuvering of ice transiting ships. Kostilainen, V., [1986, p.323-331, eng] 41-1602
- Dynamic ship/ice impact—results of parametric model testing. Daley, C.G., et al, [1986, p.349-363, eng] 41-1604
- Development of an ice piloting handbook. Brigham, L.W., [1986, p.447-456, eng] 41-1611
- "NAV-ICE"—an integrated system for ice navigation. McAvoy, J.G., et al, [1986, p.457-466, eng] 41-1612
- Ship motion in waterways clogged with broken ice. Bratanov, T., et al, [1986, p.503-571, eng] 41-1615
- Development of arctic marine technology over the last ten years. Dick, R.A., [1986, p.519-536, eng] 41-1616
- Progress in developing new design guidelines for ice transiting ships. Seibold, F., et al, [1986, p.537-552, eng] 41-1617
- Operation of ships in the Arctic. Köhler, P.E., et al, [1986, p.553-562, eng] 41-1618
- SS ACV icebreaking LNG/oil tanker for year round Arctic transportation. Murthy, T.K.S., [1986, p.563-576, eng] 41-1619
- New direction in the Arctic ice navigation research. Buznev, A.I.A., et al, [1986, p.176-178, rus] 41-1665
- Rules for the classification and construction of sea-going ships. [1986, 680p., eng] 41-1682
- How to moor in ice. Braginets, O., [1986, p.60-61, rus] 41-1792
- Method and means for increasing the maneuverability of a ship in ice-covered waters. Lord, S.M., et al, [1983, 12 col., eng] 41-1981
- International Polar Transportation Conference, 1986. [1986, 2 vols. (877p.), eng] 41-2020
- Canada's Arctic marine transportation research programs. Brenckmann, M., [1986, p.1-18, eng] 41-2021
- Polar class icebreakers. Rinehart, V., et al, [1986, p.19-40, eng] 41-2022
- Current problems in arctic vessel research. Sukselainen, J., et al, [1986, p.41-65, eng] 41-2023
- Updating the Canadian ice class rules. Grinstead, J., [1986, p.66-104, eng] 41-2024
- Local and global strength aspects for icebreaking ships. Ghoneim, G.A.M., [1986, p.105-148, eng] 41-2025
- Improving polar transportation of Canada. Jeffrey, N.E., et al, [1986, p.149-168, eng] 41-2026
- Future icebreaker design. Johansson, B.M., et al, [1986, p.169-200, eng] 41-2027
- Prospects of Arctic marine technology for the 1990's. Stubbs, J.T., et al, [1986, p.220-243, eng] 41-2029
- Arctic *Ivix*—a new Arctic class II vessel for the Beaufort Sea. Armour, R., et al, [1986, p.244-256, eng] 41-2030
- Design for a novel icebreaker assisting Arctic LNG vessels. Lindqvist, G., et al, [1986, p.257-278, eng] 41-2031
- Transportation considerations in Arctic mining development. Giegerich, H., [1986, p.352-367, eng] 41-2035
- Icebird*—a new generation of polar resupply vessel. Brune, E., [1986, p.512-522, eng] 41-2042
- Operating and design of antarctic resupply vessels. Mercer, C.L., et al, [1986, p.531-547, eng] 41-2044
- Operating experiences with the *Polarstern* in Antarctica. Suhrmeyer, L., et al, [1986, p.548-562, eng] 41-2045
- Operating of the Antarctic icebreaker *Shirase* and traverse by snow vehicle. Ishizawa, K., [1986, p.563-578, eng] 41-2046
- Air cushion vehicle *Larus* in the Beaufort Sea. Wainwright, J., et al, [1986, p.693-709, eng] 41-2052
- Winter navigation of icebreaking *Lunni*-class tankers in the Baltic Sea. Tornblom, A., [1986, p.710-725, eng] 41-2053
- Experiences from bulk transports in the Arctic. Ekholm, S., [1986, p.726-733, eng] 41-2054
- Safe speed of ships in Arctic waters. Koehler, P.E., et al, [1986, p.734-746, eng] 41-2055
- M.V. *Arctic* in the Canadian High Arctic. Luce, M., et al, [1986, p.747-763, eng] 41-2056
- Operations with icebreaking cargo vessels on the Northern Sea Route. Mikhailichenko, V., [1986, p.792-804, eng] 41-2058
- Winter marine transportation off Alaska. Brigham, L.W., [1986, p.805-819, eng] 41-2059
- Advanced radar systems for support of Arctic marine operations. Mercer, J.B., et al, [1986, p.839-858, eng] 41-2061
- Merchant ship ice navigation studies in the Canadian Arctic. Perchanok, M.S., et al, [1986, p.859-877, eng] 41-2062
- Thunder Bay management program, 1979-1985: overview report. Gillies, T.K., [1986, 86p., eng] 41-2184
- Improving Doppler radio logs installed on ice navigating ships. Cherniavets, V.V., et al, [1987, p.26-27, rus] 41-2209
- Glacial giants. History of origin, existence and deterioration of great glaciers. Balandin, R.K., [1986, 175p., rus] 41-2252
- Hydrocarbon activities in Greenland. Christensen, M., [1986, p.94-110, eng] 41-2267
- Ice surveillance by satellite. Thompson, T., [1986, p.179-186, eng] 41-2273
- Experimental study of maneuverability of icebreakers and ships in sea ice. Ionov, B.P., et al, [1986, p.276-297, eng] 41-2279
- Possibilities for Arctic heavy transportation. Wirtaila, K.L., [1986, 20p., eng] 41-2284
- Ice loads on icebreaker *Sisu* in 1979-85. Kujala, P., et al, [1986, 52p. + appends., eng] 41-2336
- International Offshore Mechanics and Arctic Engineering Symposium, 1987. [1987, 4 vols., eng] 41-2394
- Vessel transit through ridged ice. Lee, J., et al, [1987, p.307-312, eng] 41-2437
- Design criteria for Arctic shipping. Jordaan, I.J., et al, [1987, p.401-406, eng] 41-2449
- Oceanographic cruise to Baffin Bay and Nares Strait, Sep. 1986. Bourke, R.H., [1986, 23p., eng] 41-2609
- Automated navigational aids for icebreaking cargo ships. Koshevov, A.A., et al, [1987, p.20-22, rus] 41-2785
- Errors of slaved gyrocompasses when navigating in high latitudes. Chichinadze, M.V., [1987, p.34-35, rus] 41-2786
- Correlation of model and full-scale ice navigation experiments. Wolff, K., [1986, p.43-48, ger] 41-2859
- Ice problems and research: ships and offshore structures in the Arctic. Joensuu, A., [1986, p.392-399, eng] 41-2883
- Improving the efficiency of petroleum transportation by river. Zhivotkevich, N.I., ed, [1986, 96p., rus] 41-2914
- Transportation of petroleum products during the extended and winter navigation seasons. Levanov, B.I., [1986, p.61-66, rus] 41-2915
- Advance in ice mechanics in Finland. Maattanen, M., [1987, p.7-14, eng] 41-2931
- Shipping in the Arctic, autumn 1983. [1984, p.32-35, eng] 41-2937
- Quarter of a century on ice watch. Leviakov, M., [1985, p.20-21, eng] 41-2938
- Research and development looking hard at ice-going propulsion and passenger ships. [1986, p.7-8, eng] 41-2964
- New icebreaking bow makes debut. [1986, p.17-18, eng] 41-2977
- Canadian participation in the Polar Class trafficability program. Glen, I.F., et al, [1986, 63p., eng] 41-3028
- Winter navigation—a Finnish specialty. Varsta, P., [1985, p.10-13, rus] 41-3084
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al, [1987, 272p., rus] 41-3145
- Experimental ice navigation of diesel ship. Burkov, G., et al, [1986, p.42-45, rus] 41-3204
- Close range ice hazard detection: Phase 2. De Heering, P., et al, [1987, 67p. + appends. (2 vols.), eng] 41-3226
- Ocean-atmosphere interactions and climatic changes in Northern Hemisphere. Nikolaev, I.U.V., ed, [1986, 163p., eng] 41-3262
- Studying sea-atmosphere interactions during the cold season. Bogorodskii, P.V., et al, [1986, p.151-157, eng] 41-3267
- Temperature fields in the hulls of Arctic ships. Zimnitskii, I.U.A., et al, [1985, p.9-10, rus] 41-3350
- Towing gear of arctic icebreakers. Starshinov, V.A., et al, [1985, p.14-16, rus] 41-3351
- Engineering mechanics—6th conference. Abstracts. [1987, 336p., eng] 41-3352
- Sea-ice physical properties and ice navigation. Bjerkelund, C., et al, [1986, 89p. + appends., eng] 41-3363
- Ergonomic evaluation of STAR-VUE and NAV-ICE. McAvoy, G., et al, [1986, 130p. + appends., eng] 41-3365

## Ice navigation (cont.)

- Model studies of ice interaction with ship rudders and steering systems. Menon, B., et al., 1986, 2 vols., eng. 41-3372
- Manoeuvring tests in ice aboard USCGC *Polar Star* in Antarctica, 1985. Menon, B., et al., 1986, 44p. + append., eng. 41-3373
- Navigation and ship control. Collection of works. Panin, I.U.I., ed., 1986, 137p., rus. 41-3383
- Icebreaker pilotage of "Dmitrii Donskoi" type ships along the Yenisey River in the winter-spring season. Plotnikov, K.S., 1986, p.98-103, rus. 41-3384
- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed., 1986, 120p., rus. 41-3385
- Working conditions of power transmissions of ice-navigating ships. Levin, B.M., et al., 1986, p.3-8, rus. 41-3386
- Performance of propulsion system elements in SA-15 ships in ice. Volosov, M.I., 1986, p.9-23, rus. 41-3387
- Improving the performance of cooling systems on ice navigating ships. Akselrod, S.B., 1986, p.23-31, rus. 41-3388
- Modeling turbogear assemblies of ice-navigating ships. Basalygin, G.M., 1986, p.39-48, rus. 41-3389
- Noise and vibration of motorships in thick ice cover. Zinchenko, V.I., et al., 1986, p.48-63, rus. 41-3390
- NOAA Information Services for U.S. Arctic Marine Operations, 1986, 77p., eng. 41-3508
- To change the tactics of ship pilotage in ice. Leskov, M., 1987, p.30-31, rus. 41-3613
- Design margins for icebreakers. Nikolaev, V., 1987, p.42-45, rus. 41-3793
- Soviet operations on the northern sea routes, 1986. Armstrong, T., 1987, p.585-590, eng. 41-3857
- Earl Gray*: a name to live up to. Barr, W., 1987, p.593-596, eng. 41-3858
- Man, sea, technology. Narusbaev, A.A., ed., 1987, 335p., rus. 41-4145
- Ships used in the exploitation of offshore deposits. Gorshelnik, K., et al., 1987, p.221-231, rus. 41-4147
- Ship for scientific expeditions to Antarctica. Seppanen, E., 1987, p.244-246, rus. 41-4148
- Ice-breaking ferry boats of Lake Baykal. Andrienko, V.G., 1987, p.284-301, rus. 41-4149
- Ice conditions in the "Weddell-POLEX-81" study area. Chugul, I.V., 1986, p.37-41, rus. 41-4185
- Ice conditions during the *Mikhail Somov* cruise in a Soviet antarctic expedition. Proshutinskii, A.I.U., et al., 1986, p.75-78, rus. 41-4190
- Ice movement according to the FGGE buoys. Losev, S.M., et al., 1986, p.77-88, rus. 41-4199
- Space-time variations in ice conditions of the Barents, White and Baltic seas. Sheremetevskaya, O.I., 1986, p.88-93, rus. 41-4200
- Ice movement in the Arctic Ocean according to the FGGE Buoys. Gorbunov, I.U.A., et al., 1986, 96-103, rus. 41-4202
- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed., 1984, 24p., rus. 41-4503
- Methods of studying contact interactions of materials with ice and snow. Igoshin, V.A., et al., 1984, p.3-7, rus. 41-4504
- Problem of diminishing the force of icebreaker friction against ice. Maksutov, D.D., 1984, p.15-16, rus. 41-4508
- Adhesion of ice-armor masses to moving ships. Voevodin, V.A., 1984, p.17-19, rus. 41-4509
- Physical properties of liquid layers between ice and adfrozen material. Fedoseeva, V.I., 1984, p.19-24, rus. 41-4510
- Arctic ship technology: the state of the art—1986. Dick, R.A., et al., 1987, 91p., eng. 41-4582
- Ice loads on the propulsion machinery of a tanker ship. Koskikivi, J., et al., 1985, 71p. + append., eng. 41-4598
- Ice nuclei**
- Contact ice nucleation by submicron atmospheric aerosols. Deshler, T., 1982, p.111-114, eng. 41-9
- Ice nucleus measurement. Schnell, R.C., et al., 1982, p.119-122, eng. 41-11
- Storage effects on ice-forming nuclei measurements. Braham, R.R., Jr., et al., 1982, p.127-130, eng. 41-13
- On the melting of graupel and frozen raindrops. Johnson, D.B., et al., 1982, p.384-387, eng. 41-41
- Development of graupel particles and hailstones in storms. Heymsfield, A.J., 1982, p.434-437, eng. 41-51
- Aerosol ice-forming activation mechanism. Gzirishvili, T.G., 1985, p.309-314, eng. 41-215
- Possibilities of dispersing supercooled stratiform clouds and fog of large vertical extension. Voronov, G.S., 1986, p.31-43, rus. 41-1449
- Improved sampler PLIAS-2 for capturing ice-forming nuclei on membrane filters. Silaev, A.V., et al., 1986, p.76-80, rus. 41-1450
- Using equipment designed for the "Selena-1" filters in studying natural and artificial ice-forming nuclei. Silaev, A.V., et al., 1986, p.80-85, rus. 41-1451
- Studying vertical distribution of ice-forming nuclei. Khusid, S.V., et al., 1986, p.85-89, rus. 41-1452

- Photostimulated ice-forming centers in silver iodide aerosols. Oleinik, et al., 1986, p.93-97, rus. 41-1453
- Computerized simulation of artificial seeding of clouds containing ice crystals. Bulkov, M.V., et al., 1986, p.3-16, rus. 41-1555
- Partial phase diagram for the system NH<sub>3</sub>-H<sub>2</sub>O: the water-rich region. Johnson, M.L., et al., 1985, p.39-47, eng. 41-1695
- Heterogeneous nucleation of ice on aerosol nuclei with modified surfaces. Bazzazev, T.V., et al., 1986, p.119-128, rus. 41-1903
- Kinetics and mechanism of homogeneous crystallization of water. Golubev, V.N., 1986, p.5-10, rus. 41-2146
- Crystallization of motionless supercooled water. Smorygin, G.I., 1986, p.16-23, rus. 41-2148
- Surface icing of different materials. Golubev, V.N., 1986, p.121-128, rus. 41-2164
- Freezing and higher plants. Groult, B.W.W., 1986, p.203-207, eng. 41-2224
- Effect of ions on cloud condensation and ice nucleation. Singh, N., et al., 1985, p.343-350, eng. 41-2242
- Formation of a microscopic ice filament in an electric field. Akiutova, L.K., et al., 1985, p.619-620, eng. 41-2330
- X-ray diffraction and ice nucleation studies of AgI-AgCl solid solutions. Palanisamy, M., et al., 1986, p.1005-1009, eng. 41-2467
- Fit of statistical distributions to ice nuclei concentration data. Pérez, P.J., et al., 1984, p.135-140, spa. 41-2749
- Size dependence of natural aerosol for ice nucleation. Berezinskii, N.A., et al., 1986, p.28-32, rus. 41-2879
- Cloud physics of weather modification, pts. 1 and 2. Braham, R.R., Jr., 1986, p.215-222, 308-315, eng. 41-3137
- Formation kinetics of ice crystals on aerosol particles in supercooled fog. Effect of water vapor exhaustion. Gorbunov, B.Z., et al., 1986, p.333-334, eng. 41-3162
- New horizontal gradient, continuous flow, ice thermal diffusion chamber. Tomlinson, E.M., et al., 1985, p.448-467, eng. 41-3216
- Chemical tests of antarctic hygroscopic aerosols. Ohtake, T., 1985, p.208-210, eng. 41-3325
- Freezing of cloud droplets at low moisture and pressure. Burchuladze, N.N., et al., 1986, p.20-31, rus. 41-3463
- Problems of cloud physics. Voloshchuk, N.I., ed., 1986, 249p., rus. 41-3669
- Numerical simulation of the evolution of seeded supercooled stratiform clouds. Bakhanov, V.P., et al., 1986, p.26-41, rus. 41-3670
- Aerosol samplers used in size distribution study. Berezinskii, N.A., et al., 1986, p.55-63, rus. 41-3671
- Microstructural characteristics of hailstone embryos. Titov, M.I., et al., 1986, p.229-237, rus. 41-3672
- Ice-forming characteristics of giant aerosol particles in the atmosphere. Elmesov, M.S., 1986, p.238-248, rus. 41-3673
- Influence of water vapor depletion on ice nucleation of supercooled fog. Gorbunov, B.Z., et al., 1987, p.261-267, eng. 41-4362
- Ice crystal dynamics during ice nucleation of supercooled fog. Pashenko, A.E., et al., 1987, p.269-275, eng. 41-4363
- Nature of ice-forming nuclei in marine air masses. Rosinski, J., et al., 1987, p.291-309, eng. 41-4364
- Dominant ice processes in summertime cumulus clouds in the Bethlehem area. Bruijntjes, R.T., 1984, p.63-66, eng. 41-4372
- Ice particles in marine and continental clouds. Hobbs, P.V., et al., 1984, p.71-72, eng. 41-4374
- Ice openings**
- Equipment for making access holes through arctic sea ice. Mellor, M., 1986, 34p., eng. 41-3819
- Ice optics**
- Techniques to measure the spectral reflectance of ice. Bolvenga, S.J., et al., 1984, p.384-391, eng. 41-1356
- Spectral properties of water ice and contaminants. Lucey, P.G., et al., 1985, p.155-168, eng. 41-1703
- Microwave spectral emission from saline ice. Swift, C.T., et al., 1986, p.840-848, eng. 41-2298
- Scattering and absorption of visible light by sea ice. Buckley, R.G., et al., 1987, p.867-869, eng. 41-3639
- Ice override**
- Ice rumples on Ronne Ice Shelf. Smith, A.M., 1986, p.47-52, eng. 41-800
- Ice passing**
- Reinforced concrete plating for bridge reconstructions. Kvasha, V.G., et al., 1985, p.5-7, rus. 41-507
- Ice movement velocity at localized water-level drops above spillway outlets. Raspopin, G.A., et al., 1986, p.71-74, rus. 41-1395
- Allowing for stream and ice dynamics when calculating ice breakup on concentrated overfalls. Fomichev, B.S., 1986, p.83-87, rus. 41-2755
- Passing of ice and construction wastes at the Kureyskaya site. Zaltsman, O.M., et al., 1986, p.23-27, rus. 41-2865

## Ice physics

- Effects of liquid water content in clouds on ice crystal production. Foster, T., et al., 1982, p.123-126, eng. 41-12
- Three-parameter snow growth model. Lo, K.K., et al., 1982, p.197-200, eng. 41-14
- Orographic layer cloud structure. Sassen, K., 1982, p.318-321, eng. 41-23
- Physics of columnar and planar ice crystals. Wang, P.K., et al., 1982, p.338-341, eng. 41-29
- Wave propagation and remote sensing. Pre-print volume. 1986, 10 chapters, eng. 41-94
- SAR/SCAT intercomparison of microwave signatures of Arctic sea ice. Onstott, R.G., et al., 1986, p.1.7.1-1.7.3, eng. 41-96
- Remote sensing of snow-covered ice. Lin, F.C., et al., 1986, p.4.5.1-4.5.4, eng. 41-97
- Sea ice conditions in the Labrador Sea-Grand Banks area. Zakrzewski, W.P., 1986, p.60-87, eng. 41-145
- Difference in energy between cubic and hexagonal ice. Hada, Y.P., et al., 1986, p.7009-7010, eng. 41-188
- River and lake ice engineering. Ashton, G.D., ed., 1986, 485p., eng. 41-231
- Yield curve of pack ice (I): physical meaning. Ito, H., 1986, p.105-109, eng. 41-355
- Adhesion and physical properties of sea spray ice. Sackinger, W.M., et al., 1986, p.81-89, eng. 41-368
- Lattice vibrations and infrared absorption of ice Ih. Marchi, M., et al., 1986, p.2414-2418, eng. 41-395
- Reports of several international and domestic symposia. Kurda, T., et al., 1986, p.93-112, jpn. 41-443
- Ice engineering laboratory. Nippon Kohan K.K., 1986, p.113-115, jpn. 41-444
- Crystalline substances and products (methods of estimating and improving qualities). Khamskii, E.V., 1986, 222p., rus. 41-482
- Physics of ice sheets and underlying bedrock. Birchfield, G.E., et al., 1985, p.11.294-11.302, eng. 41-494
- Nature of the 'free' OH groups in water. Giguère, P.A., et al., 1986, p.341-344, eng. 41-525
- Ice forces on bridge piers. Haynes, F.D., 1986, p.83-101, eng. 41-645
- All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings. 1986, 236p., rus. 41-702
- Atmosphere and snow cover effects on emissive properties of ice. Pichugin, A.P., et al., 1986, p.119-123, rus. 41-703
- Antarctic ice sheet topography and surface-bedrock relationships. McIntyre, N.F., 1986, p.124-128, eng. 41-753
- Computation of ice cover thermal emission. Brekhovskikh, V.L., 1985, p.574-581, eng. 41-822
- Raman spectrum of high-density amorphous ice. Klug, D.D., et al., 1986, p.475-478, eng. 41-892
- Arctic vessel research laboratory and program. Jeffrey, N.E., 1986, p.467-468, eng. 41-950
- Zones and excitons of cryocrystals. Sobolev, V.V., 1986, 206p., rus. 41-997
- Offshore and navigation conference, Helsinki, 1986; POLARTECH '86, 1986, 3 vols. + Suppl., eng. 41-1087
- Physical methods of studying material used in railroad technology. Vereshchagin, I.K., ed., 1982, 135p., rus. 41-1273
- Electrical impulse method of determining the strength of frozen ground and ice. Kytin, I.U.A., 1982, p.108-113, rus. 41-1275
- Army research could reduce dangers posed by sea ice. Tucker, W.B., 1984, p.20-24, eng. 41-1329
- Lithogenesis of ground ice. Solomatin, V.I., 1986, 216p., rus. 41-1342
- Detection of sea-ice features using K(a)-band radar. Lewis, E.O., et al., 1985, p.499-500, eng. 41-1409
- Properties of ice accreted in two-stage growth. Prodi, F., et al., 1986, p.1057-1080, eng. 41-1475
- Ice technology: proceedings of the 1st International conference, 1986, 594p., eng. 41-1578
- Yield envelope for confined ice. Nadreau, J.P., et al., 1986, p.25-36, eng. 41-1580
- East Greenland Current—ice studies. Tryde, P., 1986, p.129-136, eng. 41-1588
- Comparison between the creep and the plastic analysis of ice forces by the FEM. Pulkkinen, E., 1986, p.421-430, eng. 41-1609
- Subsurface heating and melting of snow and ice. Krass, M.S., et al., 1986, p.27-38, rus. 41-1634
- Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al., 1986, p.199-228, rus. 41-1668
- Ices in the solar system: proceedings of the workshop, 1984, 1985, 954p., eng. 41-1693
- Physics of ice: some fundamentals of planetary glaciology. Whalley, E., 1985, p.9-37, eng. 41-1694
- Ice in cometary grains. Campins, H., 1985, p.443-452, eng. 41-1718
- Deriving the ice sheet evolution equations. Grigorian, S.S., et al., 1984, p.892-903, eng. 41-2074
- Bound water and ice transformations in rock and ground systems. Ershov, E.D., 1986, p.8-18, rus. 41-2081
- Problems of engineering glaciology. Alekseev, V.R., ed., 1986, 223p., rus. 41-2145

- Kinetics and mechanism of homogeneous crystallization of water. Golubev, V.N., [1986, p.5-10, rus] **41-2146**
- Electromagnetic processes accompanying water crystallization and ice deterioration. Berri, B.L., et al., [1986, p.24-32, rus] **41-2149**
- Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band. Raizer, V.I.U., et al., [1986, p.29-42, eng] **41-2207**
- Thermophysics of glaciers. Zotikov, I.A., [1986, 275p., eng] **41-2565**
- High-density amorphous ice. 3. Thermal properties. Handa, Y.P., et al., [1986, p.2766-2770, eng] **41-2570**
- Characteristics of radar echoes from sea ice. Nikitin, P.A., [1986, p.85-92, rus] **41-2719**
- Physical properties of sea ice discharged from Fram Strait. Gow, A.J., et al., [1987, p.436-439, eng] **41-2806**
- Structure and mechanical properties of artificial ice. Sav'el'ev, B.A., et al., [1986, p.169-176, rus] **41-2837**
- Advances in sea ice mechanics in the USA. Sodhi, D.S., et al., [1987, p.37-49, eng] **41-2933**
- Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al., [1986, p.21-23, eng] **41-2941**
- Some experimental findings regarding the mechanical properties of sheet ice. Epifanov, V.P., [1985, p.178-187, eng] **41-2971**
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al., [1987, 272p., rus] **41-3145**
- Ice engineering for rivers and lakes bibliography. Wortley, C.A., [1987, 117p., eng] **41-3223**
- Temperature variation of the thermal properties of ice. Osterkamp, T.E., et al., [1987, 10p. + figs., eng] **41-3238**
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] **41-3249**
- Ice island underfoot. Chilingarov, A., et al., [1986, 175p., rus] **41-3250**
- Theory of cryogenic - photochemical hydrochemical processes. Ivanov, [1987, 236p., rus] **41-3270**
- Sea-ice physical properties and ice navigation. Bjerkelund, C., et al., [1986, 89p. + append., eng] **41-3363**
- Problems in automation of geophysical investigations. Collection of works. Deviatil'nyy, A.S., ed., [1985, 162p., rus] **41-3543**
- Classification of sea ice according to structural characteristics. Aleksanina, M.G., [1985, p.52-58, rus] **41-3544**
- Research in the tunnel of Urumqi Glacier No.1. Huang, M., et al., [1987, p.99-104, eng] **41-3602**
- Breaking of ice during impact interactions. Epifanov, V.P., [1985, p.799-801, eng] **41-3629**
- Raman scattering spectra at the water-ice phase transition. Glushkov, S.M., et al., [1986, p.836-839, rus] **41-3686**
- O-H stretching vibrations of coupled O-D—O-D pairs in H<sub>2</sub>O ice Ic. Whalley, E., et al., [1987, p.7244-7245, eng] **41-3760**
- Effects of freezing temperature on the flexural properties of urea ice. Hara, Y., et al., [1986, p.31-37, jpn] **41-3781**
- Moving loads on sea ice. Squire, V.A., et al., [1987, p.569-575, eng] **41-3855**
- Winter marginal ice zone experiment, Fram Strait/Greenland Sea, 1987/89. Davidson, K., ed., [1986, 53p., eng] **41-3930**
- OH and OD stretching fundamentals of isotopically dilute HDO in ice Ih. Falk, M., [1987, p.28-30, eng] **41-4054**
- Ice-sheet failure against inclined and conical surfaces. Kaldjian, M.J., [1987, p.145-152, eng] **41-4176**
- Physical properties of summer sea ice in the Fram Strait. Tucker, W.B., et al., [1987, p.6787-6803, eng] **41-4238**
- Constitutive law for sea ice and some applications. Hakkinen, S., [1987, p.81-90, eng] **41-4275**
- Chemical fractionation of brine in McMurdo Ice Shelf. Cragin, J.H., et al., [1986, p.307-313, eng] **41-4281**
- Intrinsic curve of ice under compression. Nardeau, J.P., et al., [1987, p.(C1)322-(C1)327, fre] **41-4328**
- Collection efficiencies of soft-hail pellets for ice crystals. Saunders, C.P.R., et al., [1984, p.177-178, eng] **41-4386**
- Physical properties of liquid layers between ice and adfrozen material. Fedoseeva, V.I., [1984, p.19-24, rus] **41-4510**
- Determining the velocity of sea-surface wind from radar data of the KOSMOS-1500 satellite. Vol'pian, G.V., et al., [1987, p.3-11, rus] **41-4620**
- Ice pileup**
- Natural shoal rubble pile study, Beaufort Sea, March-April 1979. McGonigal, D., et al., [1986, 36p. + figs., eng] **41-3548**
- Ice productivity**
- Yield curve of pack ice (1): physical meaning. Ito, H., [1986, p.105-109, eng] **41-355**
- Yield curve of pack ice (2): general shape. Ito, H., [1986, p.111-117, eng] **41-356**
- Strength and ductility of ice under tension. Lee, R.W., et al., [1985, 220p., eng] **41-1679**
- Constitutive modeling of ice. Vinogradov, A.M., [1987, p.181-188, eng] **41-2420**
- Ice pressure**
- State of stress and thermal stresses in concretes and reinforced concretes of hydraulic structures. Karavaev, A.V., ed., [1985, 104p., rus] **41-428**
- Flood water stresses on the protective hydraulic structures of Leningrad. Konstantinova, R.G., et al., [1985, p.88-91, rus] **41-430**
- Reinforced concrete plating for bridge reconstructions. Kvasha, V.G., et al., [1985, p.5-7, rus] **41-507**
- Calculation of global ice force from wall-mounted pressure sensors. Myers, P.E., [1985, p.685-692, eng] **41-667**
- Determination of ice forces with centrifuge models. Clough, H.F., et al., [1986, p.49-60, eng] **41-1035**
- On the frequency analysis of ice peaks. Javanainen, M., [1986, p.222-227, eng] **41-1098**
- Field performance of an ice force panel for *in situ* and structural measurements. Witney, K.C., et al., [1986, p.241-261, eng] **41-1100**
- Ice forces on model Arctic structures. Gowda, S.S., et al., [1986, p.693-706, eng] **41-1125**
- Ice cover deformations at Adams Island, winter 1982-1983. Sayed, M., et al., [1986, p.346-354, eng] **41-1160**
- Selection of optimal dimensions for hydraulic structures in ports. Piniagin, B.A., et al., [1986, p.77-81, rus] **41-1396**
- Ship building technology based on research data. Sukselainen, J., [1985, p.36-39, rus] **41-1517**
- Experimental study on permeability coefficient of sea ice. Saeki, H., et al., [1986, p.237-246, eng] **41-1595**
- Ice stress measurements in a rubble field surrounding a caisson-retained island. Sayed, M., et al., [1986, p.255-262, eng] **41-1597**
- Hydrology of water ice. Gaffney, E.S., [1985, p.119-148, eng] **41-1701**
- Future icebreaker design. Johansson, B.M., et al., [1986, p.169-200, eng] **41-2027**
- Scandinavian report. [1983, p.S1-S16, eng] **41-2226**
- Ice research and problems of hydraulic construction in cold regions. Sparboom, U., [1984, p.1511-1513, ger] **41-2256**
- Ship/ice interaction pressures and energies during ship ramming. Kivisild, H.R., et al., [1987, p.215-223, eng] **41-2424**
- Ice load distribution and ice pressure on offshore structure. Koma, N., et al., [1987, p.299-305, eng] **41-2436**
- Determination of the ice load on elements of marine hydraulic structures. Gol'din, A.L., et al., [1987, p.417-420, eng] **41-2601**
- Ice ramps and the history of studies on them. Sasaki, T., [1986, p.215-221, jpn] **41-2605**
- Ice blasting. Tavrizov, V.M., [1986, 136p., rus] **41-2646**
- Hydraulic construction in ports and engineering research in coastal zones of seas. Kostikov, V.D., ed., [1986, 169p., rus] **41-2709**
- Interaction of pressure ridges with cylindrical supports of hydraulic structures. Belov, A.B., et al., [1986, p.34-37, rus] **41-2710**
- Ice problems and research: ships and offshore structures in the Arctic. Joensuu, A., [1986, p.392-399, eng] **41-2883**
- Advance in ice mechanics in Finland. Maattanen, M., [1987, p.7-14, eng] **41-2931**
- Effects of ice action under conditions of the lower connections of spherical liquefied-gas tanks. Pavel, A., [1986, p.628-630, rum] **41-3069**
- Seabed response to ice forces: summary and discussion. Roggensack, W., et al., [1986, p.148-153, eng] **41-3105**
- Corps of engineers seek ice solutions. Frankenstein, G.E., [1987, p.5-7, eng] **41-3140**
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al., [1987, 272p., rus] **41-3145**
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al., [1987, p.249-285, eng] **41-3284**
- Daring to challenge deep water, thick ice. Kelly, D.F., [1985, p.6-14, eng] **41-3411**
- Issungnak rubble pile—field installation of ice stress panels—interim report. Vaudrey, K.D., [1980, 13p. + append., eng] **41-3552**
- Ice stress panel results, Issungnak 1980. McGonigal, D., [1981, 14p. + figs., eng] **41-3553**
- Ice forces on conical offshore structures. Kolymbas, D., [1987, p.217-231, eng] **41-3572**
- Long river crossings of overhead power lines. Elenbogen, G.N., et al., [1987, p.2-9, rus] **41-3611**
- Conditions for crack propagation by frost wedging. Sharp, T.M., [1987, p.94-102, eng] **41-4210**
- Intrinsic curve of ice under compression. Nardeau, J.P., et al., [1987, p.(C1)322-(C1)327, fre] **41-4328**
- See also: Ice push
- Ice pressure ridges**
- See: Pressure ridges
- Ice prevention**
- Prevention of naled formation on Kirghizian mountain roads. Turgunbaev, A.T., [1985, p.26-27, rus] **41-504**
- Passing spring meltwater when pipes are clogged by naleds. Dement'ev, V.A., [1986, p.16-17, rus] **41-511**
- Scientific and technical progress in road construction. Aitmatov, I.T., ed., [1984, 158p., rus] **41-785**
- Influence of thermoinsulative layers on temperature regime of road pavements. Dulshenaliev, M., [1984, p.140-145, rus] **41-786**
- LAMPS MK III environmental capabilities. Olmstead, J., [1986, p.185-200, eng] **41-932**
- Engineering program on anti-de-icing of the RAST track. Boston, D.A., [1986, p.201-214, eng] **41-933**
- Anti-icing and de-icing of naval surface ships. Garbe, G.H., [1986, p.263-282, eng] **41-937**
- Prevention and retardation of ice formation at sea. Minasian, D.T., [1986, p.283-295, eng] **41-938**
- Marine gas turbine inlet de-icing. Reinauer, G.A., [1986, p.457-461, eng] **41-949**
- Offshore anti-icing, field results and approval considerations. Lonsdale, J.T., et al., [1986, p.471-483, eng] **41-1113**
- Computer modelling of ice accretion and control of icing on marine units. Løset, S., et al., [1986, p.497-511, eng] **41-1115**
- Low adhesion coatings for sea spray icing on offshore structures. Sackinger, W.M., et al., [1986, p.512-527, eng] **41-1116**
- Heat pipe deicing apparatus. Matsuda, S., et al., [1981, 6 col., eng] **41-1673**
- Ramp de-icing. [1975, 16p., eng] **41-1761**
- Anti-icing and deicing-defrosting fluids. [1985, 13p., eng] **41-1762**
- Device for attachment to motor vehicle windows to prevent fogging or icing. Schmitt, W., [1983, 6 col., eng] **41-1767**
- Microwave ice prevention system. Hansman, R.J., Jr., [1982, 4 col., eng] **41-1995**
- Lightweight heater tape for shuttle propellant tank. Spencer, D.J., et al., [1986, 51p., eng] **41-2070**
- Test results: performance of two ice-retardant overlays. [1986, p.30-33, eng] **41-2696**
- Thermal environment around the Space Shuttle with hot-gas jets for ice suppression. Singhal, A.K., et al., [1986, p.547-553, eng] **41-2738**
- Snow removal equipment, snowplows, road cleaning machines. Teklin, V.G., [1986, 232p., rus] **41-3011**
- Superstructure icing in relation to ship safety and operations, Canada. Holburn, J.G., et al., [1986, 106p., eng] **41-3374**
- Ground aircraft deicing technology review. Mayer, D., et al., [1986, var.p., eng] **41-3378**
- Experimental study of fluid deicing system. [1983, 152p., eng] **41-3379**
- NASA's aircraft icing analysis program. Shaw, R.J., [1986, 26p., eng] **41-4157**
- See also: Chemical ice prevention; Ice control
- Ice push**
- Ten years of ice-induced vibration isolation in lighthouses. Mänttinen, M., [1987, p.261-266, eng] **41-2430**
- Bank conditions and erosion along selected reservoirs. Gatto, L.W., et al., [1987, p.143-154, eng] **41-2495**
- Ice rafting**
- Late Pleistocene sedimentation processes on the antarctic continental shelf. Grobe, H., [1986, 121p. + figs., ger] **41-267**
- Sea ice breakup and tidal flats processes, Frobisher Bay, Baffin Island. McCann, S.B., et al., [1986, p.168-180, eng] **41-362**
- Problems of studying sediment balance in coastal zones of seas. Shulskii, I.U.D., [1986, 240p., rus] **41-516**
- Aerial survey of a salt marsh: ice rafting to the lower intertidal zone. Hardwick-Witman, M.N., [1986, p.379-383, eng] **41-2244**
- Glacial giants. History of origin, existence and deterioration of great glaciers. Balandin, R.K., [1986, 175p., rus] **41-2252**
- Sedimentation at the foot of volcanoes in various climatic settings. Kuralenko, N.P., [1986, 111p., rus] **41-2363**
- Bank conditions and erosion along selected reservoirs. Gatto, L.W., et al., [1987, p.143-154, eng] **41-2495**
- Antarctic ice rafting debris and sediments. Anderson, J.B., [1986, p.503-505, eng] **41-2800**
- Morphology and lithogenesis of rock streams. Govorushko, S.M., [1986, 120p., rus] **41-2901**
- Processes of glaciomarine sedimentation. Drowdeswell, J.A., [1987, p.52-90, eng] **41-4132**
- Studies of natural conditions and prospects for their application. Matveev, N.P., ed., [1985, 118p., rus] **41-4560**
- Ice rafting of clastic material. Borsuk, O.A., [1985, p.51-54, rus] **41-4561**
- Ice reconnaissance**
- See: Ice reporting; Ice conditions; Ice surveys
- Ice regime**
- See: Ice conditions
- Ice removal**
- Snow and ice removal from railroad switches in Europe. Takakuwa, Y., [1985, p.21-25, jpn] **41-182**
- Countermeasures against damage by snowfall on distribution facilities. Kato, I., [1985, p.29-32, jpn] **41-184**
- Performance of two ice-retardant overlays. Tanski, J.H., [1986, 42p., eng] **41-248**

## Ice removal (cont.)

- Winter service in Steiermark, Austria. Dirnböck, G., [1985, p.17-21, ger] 41-386
- Winter service on main-street network in Slovenia. Ocirk, R., [1985, p.31-35, ger] 41-387
- Winter service on the municipal highways. Sauer, A., [1985, p.37-40, ger] 41-388
- Optimization of the winter service in Rheinland-Pfalz. Rude, B.J., [1985, p.41-46, ger] 41-389
- Development and use of a new melting agent. Washütl, J., [1985, p.49-57, ger] 41-390
- Anti-icing and de-icing of naval surface ships. Garbe, G.H., [1986, p.263-282, eng] 41-937
- Spray ice bonding to superstructure coatings. Sackinger, W.M., [1986, p.453-455, eng] 41-948
- Marine gas turbine inlet de-icing. Reinauer, G.A., [1986, p.457-461, eng] 41-949
- Offshore anti-icing, field results and approval considerations. Lonsdale, J.T., et al, [1986, p.471-483, eng] 41-1113
- Adhesive strength of spray accreted ice on materials and coatings. Lyyra, M., et al, [1986, p.484-496, eng] 41-1114
- State-of-the-art of ground aircraft deicing technology. Mayer, D., [1986, 13p., eng] 41-1354
- On fracture mechanics in lifting an ice sheet. Liu, C.H., et al, [1985, p.189-197, eng] 41-1359
- Ice scraper. Brace, A.W., et al, [1983, 4 col., eng] 41-1671
- Curved glass ice-scraper. Porchet, M., [1983, 2 col., eng] 41-1672
- Antenna ice removal and prevention apparatus. Walton, W.B., Jr., [1983, 4 col., eng] 41-1979
- Ice breaker. Regina, M.J., [1982, 2 col., eng] 41-1994
- Electric heater-blower apparatus for removing frost and snow from vehicle windows. Stephens, W.S., III, [1982, 6 col., eng] 41-1996
- Units and vehicles for spreading de-icing agents. Kotte, G., [1986, p.12-16, eng] 41-2326
- Helicopter deicer control system. Adams, L.J., [1981, 18 col. + 7 sheets, eng] 41-2368
- Antenna deicing apparatus. Levin, H.L., [1981, 6 col. + 3 sheets, eng] 41-2369
- Swinging door particle separator and deicing system. Norris, R.M., et al, [1981, 4 col. + 3 sheets, eng] 41-2370
- Deicing system. Holwerda, S.J., [1980, 12 col. + 3 sheets, eng] 41-2371
- Apparatus for deicing of trolley wires. Shimada, A., et al, [1980, 12 col. + 5 sheets, eng] 41-2372
- Introduction to the International Winter Road Congress, 1986. Suonio, V., [1986, p.32-34, eng] 41-2486
- Winter serviceability in PIARC member countries. Lannoy, H. de, [1986, p.35-48, eng] 41-2487
- Exhibition and demonstration of equipment. Hintikka, J., [1986, p.78-81, eng] 41-2489
- Noise-torque electro-impulse deicing systems. Sandorff, P.E., [1984, 10 col. + 4 sheets, eng] 41-2496
- Pneumatic deicer and deicing method. Ely, D.N., et al, [1983, 6 col. + figs., eng] 41-2498
- Device for controlling ice formation on contoured surfaces. Cattaneo, C.J., et al, [1985, 6 col. + 3 sheets, eng] 41-2499
- Calculating harmonic component levels when heating iced power lines. Zhezhelenko, I.V., et al, [1986, p.16-21, rus] 41-2546
- Ice destruction. Methods and technology. Bogorodskii, V.V., et al, [1986, 214p., eng] 41-2564
- Rotorcraft icing technology—an update. Ward, R., et al, [1983, p.(8)1-(8)15, eng] 41-3231
- Harbor design for ice conditions. Wortley, C.A., [1987, p.14-15, eng] 41-3410
- Spray ice: a menace to mariners. Freeman, K., [1987, p.11-13, 39, eng] 41-3412
- Managing budgets for snow control. Fisher, K.J., [1987, p.28-37, eng] 41-3415
- New ice repellent coating system using polymers. Ohishi, F., et al, [1987, p.9-17, jpn] 41-3754
- Hot sand for improved traction on icy roads. Reckard, M.K., [1985, 7p., eng] 41-4000
- Ice reporting**
- Ice in the Azov Sea. Fomicheva, L.A., [1986, p.3-10, rus] 41-1970
- Ice alert levels for Arctic operations. Dunwoody, A.B., [1987, p.41-46, eng] 41-2400
- Space-time variations in ice conditions of the Barents, White and Baltic seas. Sheremetevskaia, O.I., [1986, p.88-93, rus] 41-4200
- See also: Ice surveys
- Ice ridges**
- See: Pressure ridges
- Ice roads**
- Floating ice roads and runways: critical speed phenomena. Hinchey, M.J., [1986, p.139-147, eng] 41-176
- Construction of temporary winter roads and ice crossings. Titaveva, G.A., et al, [1986, p.13-14, rus] 41-914
- Transportation of heavy modules to the Arctic. Kirkeide, K.L., et al, [1986, p.1160-1168, eng] 41-1151
- Caterpillar and wheeled hauling-tractors. Platonov, V.F., et al, [1986, 295p., rus] 41-1688

- Reinforcement of ice bridges over rivers via layer-by-layer ice buildup. Vislobitskii, P.A., et al, [1986, p.63-70, eng] 41-1855
- Air and ice road transportation to support northern mines. Tamblin, H., [1986, p.368-375, eng] 41-2036
- Current ice road and structure design and construction procedures. Masterson, D.M., et al, [1986, p.602-648, eng] 41-2048
- Problems of engineering glaciology. Alekseev, V.R., ed, [1986, 223p., rus] 41-2145
- Providing hydrometeorological information for building ice roads and crossings in the Irkutsk Region and the Buryat ASSR. Furman, M.Sh., [1986, p.217-221, rus] 41-2182
- Operation of light air cushion vehicle at McMurdo Sound. Dibbern, J.S., [1987, 139p., eng] 41-2257
- Transport over floating ice sheets. Hinchey, M.J., [1987, p.321-328, eng] 41-2439
- Transportation of heavy blocks on ice-snow roads. Rastorguev, G.A., et al, [1986, p.13-14, rus] 41-2780
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, [1986, 328p., rus] 41-3664
- Ice rubber friction**
- See: Rubber ice friction
- Ice runways**
- Floating ice roads and runways: critical speed phenomena. Hinchey, M.J., [1986, p.139-147, eng] 41-176
- Air services support to northern operators. Davidson, D., [1986, p.279-294, eng] 41-2032
- Moving loads on sea ice. Squire, V.A., et al, [1987, p.569-575, eng] 41-3855
- Ice salinity**
- Arctic ice shelf growth, fiord oceanography and climate. Jeffries, M.O., et al, [1984, p.147-153, eng] 41-631
- Radio-echo investigations of Ronne Ice Shelf. Crabtree, R.D., et al, [1986, p.37-41, eng] 41-735
- Microwave dielectric, structural and salinity properties of sea ice. Arcone, S.A., et al, [1986, p.832-839, eng] 41-2297
- Microwave spectral emission from saline ice. Swift, C.T., et al, [1986, p.840-848, eng] 41-2298
- Compressive behavior of saline ice. Richter-Menge, J.A., [1986, p.331-350, eng] 41-2664
- Compressive strength of saline ice. Blair, S.C., [1986, p.351-364, eng] 41-2665
- Small-scale projectile penetration in saline ice. Cole, D.M., et al, [1986, p.415-438, eng] 41-2668
- Salinity, alkalinity, and calcium of the Weddell Sea ice. Chen, C.-T.A., [1985, p.117-119, eng] 41-2953
- Analysis of the tensor dielectric constant of sea ice at microwave frequencies. Stogryn, A., [1987, p.147-158, eng] 41-3315
- Sea-ice crystal structure and salinity, Hebron Fiord, Labrador. Gow, A.J., [1987, 18p., eng] 41-4144
- Chemical fractionation of brine in McMurdo Ice Shelf. Cragin, J.H., et al, [1986, p.307-313, eng] 41-4281
- Sea ice salinity and porosity changes during storage. Cox, G.F.N., et al, [1986, p.371-375, eng] 41-4291
- Measurement of saline ice thickness using a step frequency radar. Iizuka, K., et al, [1986, 20p., eng] 41-4511
- Ice sampling**
- Bacterial populations in soils of a subantarctic island. French, D.D., et al, [1986, p.75-82, eng] 41-501
- Atmospheric toxic metals in snow and ice. Boutron, C.F., [1986, p.467-505, eng] 41-672
- Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples. Kerimov, A.M., et al, [1985, p.71-78, rus] 41-846
- Wilkes Land Expedition 1985: biological observations in the ice-edge zone. Garrison, D.L., et al, [1985, p.123-124, eng] 41-2954
- Law observed in the generation of sound in ice samples subjected to loading. Mitiaev, P.V., et al, [1986, p.168-169, rus] 41-3240
- Development of a frazil ice sampler. Brockett, B.E., et al, [1986, 12p., eng] 41-3257
- Ice scouring**
- Research priorities in Canadian waters. Godgens, D.O., [1986, p.295-332, eng] 41-251
- Evaluation of sea bottom ice scour models. Comfort, G., et al, [1986, 71p. + graphs., eng] 41-273
- Caisson drilling and completion system. Hewlett, C., [1986, p.459-468, eng] 41-361
- 1985 field studies, Beaufort and Chukchi Seas, conducted from the NOAA ship *Discoverer*. Miley, J.M., ed, [1986, 57p. + figs., eng] 41-831
- Some factors influencing iceberg scour estimates. Prasad, K.S.R., et al, [1986, p.234-239, eng] 41-849
- Understanding the Arctic sea floor for engineering. [1982, 141p., eng] 41-893
- Controlling factors of ice-created sea floor features. Clark, J.I., et al, [1986, p.565-582, eng] 41-1118
- Canadian Beaufort Sea 1984 repetitive mapping of ice scour. Shearer, J., et al, [1986, 43p. + appends. + maps, eng] 41-1566
- Proceedings [1978, 4 vols. (2653p.), eng] 41-2120
- First offshore drilling in the Beaufort Sea. Todd, M.B., [1978, p.399-405, eng] 41-2125
- Model study of iceberg scouring in North Atlantic. Chari, T.R., et al, [1978, p.2319-2326, eng] 41-2128

- Bank conditions and erosion along selected reservoirs. Gatto, L.W., et al, [1987, p.143-154, eng] 41-2495
- Ice scour and seabed engineering. [1986, 322p., eng] 41-3086
- Marine pipeline design in ice environments. McKeehan, D.S., [1986, p.9-17, eng] 41-3087
- Engineering aspects of ice gouging. Bes, R.G., [1986, p.18-28, eng] 41-3088
- Engineering applications and risk assessment: summary and discussion. Allan, D., et al, [1986, p.31-37, eng] 41-3089
- Ice-gouge studies, Alaskan Beaufort Sea. Barnes, P.W., et al, [1986, p.41-50, eng] 41-3090
- Ice scouring in the Canadian Beaufort Sea. McGonigal, D., et al, [1986, p.51-59, eng] 41-3091
- Hydrodynamic forces and iceberg stability. Bass, D.W., et al, [1986, p.60-62, eng] 41-3092
- Relict ice scours on King William Island, N.W.T. Woodworth-Lynas, C.M.T., et al, [1986, p.64-72, eng] 41-3093
- Grand Bank pits: description and postulated origin. Barrie, J.V., et al, [1986, p.73-77, eng] 41-3094
- Deformation by ice of sediment remanent magnetism. Day, T., [1986, p.78-81, eng] 41-3095
- Iceberg scouring and its effect on seabed, Norwegian shelf. Lien, R., [1986, p.87-96, eng] 41-3096
- Review of deterministic ice-scour models. Comfort, G., et al, [1986, p.97-108, eng] 41-3097
- Iceberg-scour modelling at Memorial University of Newfoundland. Chari, T.R., [1986, p.109-117, eng] 41-3098
- Hibernia ice-scour model studies. Schoenthaler, L., [1986, p.118-121, eng] 41-3099
- Iceberg crater chains and scour up- and downslope. Bass, D., et al, [1986, p.122-128, eng] 41-3100
- Dynamics of Iceberg Grounding and Scouring (DIGS) experiment. Lewis, C.F.M., [1986, p.129-131, eng] 41-3101
- Regional geology and seabed dynamics at the proposed iceberg scour (DIGS) experiment site. Josenhans, H.W., [1986, p.132-137, eng] 41-3102
- Iceberg dynamics of the DIGS experiment. Lever, J., [1986, p.138-142, eng] 41-3103
- Geotechnical aspects of the DIGS experiment. Moran, K., [1986, p.143-147, eng] 41-3104
- Seabed response to ice forces: summary and discussion. Roggensack, W., et al, [1986, p.148-153, eng] 41-3105
- Ocean-bottom sea-ice scour: a computer-based data management system. Gilbert, G.R., et al, [1986, p.157-166, eng] 41-3106
- Beaufort Sea ice scour extreme depth and age. Shearer, J., et al, [1986, p.167-169, eng] 41-3107
- Iceberg scour distribution, Baffin Island, Canada. King, E.L., et al, [1986, p.172-181, eng] 41-3108
- Iceberg scouring on Sagkeg Bank, northern Labrador Shelf. Todd, B.J., [1986, p.182-193, eng] 41-3109
- Documentation of iceberg groundings. El-Tahan, M., et al, [1986, p.194-199, eng] 41-3110
- Grand Banks ice-scour catalogue. Schoenthaler, L., [1986, p.200-203, eng] 41-3111
- Regional ice-scour studies and data bases: issues and concerns. Blasco, S.M., [1986, p.206-209, eng] 41-3112
- Estimating ice-scour frequency and risk to buried pipelines. Pilkington, R., [1986, p.213-220, eng] 41-3113
- Numerical model for iceberg grounding events. D'Apollonia, S.J., et al, [1986, p.221-232, eng] 41-3114
- Palynology as a method for dating iceberg scours. Mudie, P.J., [1986, p.233-239, eng] 41-3115
- Risk assessment for iceberg-scour damage: Labrador Sea and Grand Banks. Allan, D., [1986, p.240-248, eng] 41-3116
- Populations of iceberg scour depths. Gaskill, H., [1986, p.249-258, eng] 41-3117
- Preliminary simulation of the formation and infilling of sea ice gouges. Weeks, W.F., et al, [1986, p.259-268, eng] 41-3118
- Iceberg-grounding study, Labrador well-site observations. Woodworth-Lynas, C.M.T., et al, [1986, p.269-283, eng] 41-3119
- Towards repetitive mapping of ice scours in the Beaufort Sea. Shearer, J., et al, [1986, p.284-286, eng] 41-3120
- Design of a repetitive-mapping network for ice scour: east coast. Hodgson, G.J., [1986, p.287-292, eng] 41-3121
- Some recent studies relating to the determination of pipeline depths. Marcellus, R.W., et al, [1986, p.295-303, eng] 41-3122
- Ice-scour research: long-term plan for ESRF. Livingstone, W.R., [1986, p.307-313, eng] 41-3123
- Geotechnical engineering offshore, eastern Canada. Brown, J.D., [1986, p.852-878, eng] 41-3169
- Iceberg scouring: hazard for seabed development. Lewis, C.F.M., et al, [1986, p.1020-1021, eng] 41-3173
- Iceberg scour mapping for the Canadian East Coast. Lewis, C.F.M., [1987, 45p. + maps, eng] 41-3225
- Geologic studies in Alaska by the U.S. Geological Survey during 1986. Hamilton, T.D., ed, [1987, 195p., eng] 41-3466



- Beaufort Sea coastal currents: a divergence near Barter Island, Alaska? Barnes, P.W., et al, [1987, p.139-142, eng] **41-3468**
- Ice scour mosaic comparison study, 1980. Shearer, J., [1980, 17p. + figs., eng] **41-3474**
- Iceberg scouring rate studies, Grand Banks of Newfoundland. Lewis, C.F.M., et al, [1987, p.825-833, eng] **41-4013**
- Iceberg scoring off SE Baffin Island. Prag, D., et al, [1987, p.847-857, eng] **41-4014**
- Newly formed ice gouges in Harrison Bay, Alaska. Rearic, D.M., [1986, 52p., eng] **41-4107**
- Glacial and iceberg effects on morphology off Wilkes Land. Barnes, P.W., [1987, p.175-194, eng] **41-4545**
- Ice sheets**
- Isotope research in Antarctica. Schütze, H., [1985, p.2-5, ger] **41-76**
- Paleogeological investigations of fossil ground ice in permafrost. Kaplanskiia, F.A., et al, [1986, p.65-72, rus] **41-107**
- Maximum southward advance of the Kara center ice sheet. Diatlova, I.N., [1986, p.154-157, rus] **41-125**
- Surface features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al, [1986, p.168-170, eng] **41-411**
- Physics of ice sheets and underlying bedrock. Birchfield, G.E., et al, [1985, p.1129-11302, eng] **41-494**
- Global ice-sheet system interlocked by sea level. Denton, G.H., et al, [1986, p.3-26, eng] **41-611**
- Some relationship between antarctic ice extent and climate. Peng, G., et al, [1983, p.303-309, chi] **41-673**
- Numerical study of plane ice-sheet flow. Hutter, K., et al, [1986, p.139-160, eng] **41-674**
- Determination of particle paths using the finite-element method. Stolle, D.F.E., et al, [1986, p.219-223, eng] **41-681**
- Effect of till rheology on the flow and profile of the Laurentide ice sheet, USA. Beget, J.E., [1986, p.235-241, eng] **41-684**
- Glacier flow response to perturbations in ice thickness and surface slope. Echelmeyer, K.A., et al, [1986, p.285-298, eng] **41-689**
- Snow and ice in Earth's environment. Kotliakov, V.M., [1986, 157p., rus] **41-698**
- Antarctic ice sheet topography and surface-bedrock relationships. McIntyre, N.F., [1986, p.124-128, eng] **41-753**
- Analysis and simulation of altimeter performance for the production of ice sheet topographic maps. Partington, K.C., et al, [1986, p.141-145, eng] **41-757**
- Multispectral digital image mapping of antarctic ice features. Swinbank, C., et al, [1986, p.159-163, eng] **41-761**
- Traces of Icelandic eruptions in the Greenland Ice Sheet. Hammer, C.U., [1984, p.51-65, eng] **41-804**
- Ice and snow of the north polar caps of Mars and Earth. Foster, J., et al, [1986, p.223-235, eng] **41-959**
- West Antarctic ice sheet dynamics. Van der Veen, C.J., [1985, p.732-734, eng] **41-983**
- Water masses and circulation of the southern ocean. Sarukhanian, E.I., et al, [1986, 288p., rus] **41-1013**
- Placers of cosmic dust in the blue ice lakes of Greenland. Maurette, M., et al, [1986, p.869-872, eng] **41-1070**
- On fracture mechanics in lifting an ice sheet. Liu, C.H., et al, [1985, p.189-197, eng] **41-1359**
- Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, [1986, p.1-12, eng] **41-1469**
- Mathematical model and forecasts of thermokarst evolution. Grigorian, S.S., et al, [1986, p.45-49, rus] **41-1636**
- Stratospheric and tropospheric sources for nitrate in antarctic snow. Legrand, M.R., et al, [1986, p.236-249, eng] **41-1754**
- Pseudomonas genus of bacteria isolated from Antarctic ice sheets. Sorokina, T.A., et al, [1986, p.494-504, rus] **41-1824**
- Polar ice sheets: a wild card in the deck. Jacobs, S.S., [1986, p.50-54, eng] **41-1900**
- Folding in the Greenland ice sheet. Whillans, I.M., et al, [1987, p.485-493, eng] **41-1976**
- Deriving the ice sheet evolution equations. Grigorian, S.S., et al, [1984, p.892-903, eng] **41-2074**
- The ice: a journey to Antarctica. Pyne, S.J., [1986, 428p., eng] **41-2079**
- Glacial giants. History of origin, existence and deterioration of great glaciers. Balandin, R.K., [1986, 175p., rus] **41-2252**
- Modelling of the Glaciers-Ocean-Atmosphere system. Verbitskii, M.I.A., et al, [1986, 133p., rus] **41-2253**
- Observing the polar regions from space. Thomas, R.H., [1984, p.165-171, eng] **41-2338**
- Antarctic ice sheet studies: results and plans. Aver'ianov, V.G., et al, [1984, p.79-85, rus] **41-2356**
- Force budget of ice sheets. Whillans, I.M., [1987, p.17-36, eng] **41-2462**
- Methanesulphonate in antarctic ice. Ivey, J.P., et al, [1986, p.375-379, eng] **41-2503**
- Thermophysics of glaciers. Zotikov, I.A., [1986, 275p., eng] **41-2565**
- Arctic shelf in the late Pleistocene and certain problems of paleogeology. Vozovik, I.U.I., [1986, p.449-452, eng] **41-2572**
- Geology and origin of the Elephant Moraine on the east antarctic ice sheet. Faure, G., et al, [1985, p.11-12, eng] **41-2623**
- Reinterpretation of glaciovolcanic interactions in Marie Byrd Land. McIntosh, W.C., et al, [1985, p.57-59, eng] **41-2624**
- Radiocarbon chronology of the last glaciation in McMurdo Sound. Denton, G.H., et al, [1985, p.59-61, eng] **41-2625**
- Glaciogeophysical survey of the Ross Embayment, 1984-1985. Bentley, C.R., et al, [1985, p.63-64, eng] **41-2626**
- Uranium-series dating of Allan Hills ice. Fireman, E.L., [1985, p.70-71, eng] **41-2630**
- Shear heating instabilities of large ice sheets. Yuen, D.A., et al, [1985, p.74-75, eng] **41-2634**
- ERS-1 radar altimeter mission. Francis, C.R., [1986, p.287-295, eng] **41-2702**
- Trace elements in the Greenland Ice Cap melt zone. Chevallier, P., et al, [1987, p.E649-E656, eng] **41-2728**
- Reconstructions of Wisconsinan Laurentide ice sheet. Fisher, D.A., et al, [1985, p.229-238, eng] **41-2760**
- Elements of a computational theory for glaciers. Yakowitz, S., et al, [1986, p.132-150, eng] **41-2896**
- Climatic warming and basal melting of large ice sheets. Saari, M.R., et al, [1987, p.33-36, eng] **41-2947**
- Topographic Rossby waves over Antarctica. Egger, J., et al, [1987, p.110-115, eng] **41-3134**
- On the application of lattice statistics to bubble trapping in ice. Enting, I.G., [1987, p.100-113, eng] **41-3195**
- Area of antarctic ice shelves. Sutova, I.A., [1986, p.213-226, eng] **41-3201**
- Dynamics of the West Antarctic Ice Sheet. Van der Veen, C.J., ed, [1987, 368p., eng] **41-3271**
- West Antarctic Ice Sheet: the need to understand its dynamics. Van der Veen, C.J., [1987, p.1-16, eng] **41-3272**
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] **41-3280**
- On the flow within the transition zone between ice sheet and ice shelf. Herterich, K., [1987, p.185-202, eng] **41-3281**
- Finite-element method applied to a time-dependent flowband model. Fastook, J.L., [1987, p.203-221, eng] **41-3282**
- Longitudinal stresses and basal sliding: a comparative study. Van der Veen, C.J., [1987, p.223-248, eng] **41-3283**
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al, [1987, p.249-285, eng] **41-3284**
- Modelling the response of the West Antarctic Ice Sheet to a climatic warming. Budd, W.F., et al, [1987, p.321-358, eng] **41-3287**
- Landsat multispectral images of Antarctica applied to mapping and glaciology. Lucchitta, B.K., et al, [1985, p.256-259, eng] **41-3327**
- Subglacial drainage for an ice sheet resting upon a layered deformable bed. Shoemaker, E.M., et al, [1987, p.4935-4946, eng] **41-3342**
- Radioactive isotopes related to ice sheet accumulation and ablation. Lal, D., et al, [1987, p.4947-4952, eng] **41-3343**
- Antarctic ice and rocks. Doake, C.S.M., [1987, p.138-189, eng] **41-3532**
- Surface topography of large ice masses from Landsat imagery. Dowdeswell, J.A., et al, [1987, p.16-23, eng] **41-3591**
- Periodic ice cliff avalanche, Ellesmere Island. Evans, D.J.A., et al, [1987, p.68-71, eng] **41-3598**
- Paleogeological studies of relic ground ice in permafrost. Kaplanskiia, F.A., et al, [1986, p.257-266, eng] **41-3616**
- JARE-26 glaciological research, 1984-1986. Ageta, Y., et al, [1987, 71p., eng] **41-3668**
- Giant tabular iceberg data from satellite. McIntyre, N.F., et al, [1987, p.458-462, eng] **41-3677**
- Laboratory investigation of the melting of ice by induced convection. Bogorodskii, V.V., et al, [1986, p.94-96, eng] **41-3682**
- Antarctic ecosystem. Benninghoff, W.S., [1987, p.9-14, eng] **41-3739**
- Thermomechanical balances of ice sheet flows. Morland, L.W., [1984, p.237-266, eng] **41-3791**
- Greenland ice-sheet margin—a mine of ice for paleo-environmental studies. Reeh, N., et al, [1987, p.229-234, eng] **41-3794**
- Oceanic heat flux through a young sea-ice sheet. Ono, N., et al, [1986, p.37-43, jpn] **41-3878**
- Oxygen isotope ratio in meltwater of the ice cap, Jakobshavn. Reeh, N., et al, [1986, 34p., dan] **41-3938**
- Glacioclimatological research. Aver'ianov, V.G., [1986, p.86-91, eng] **41-3952**
- Ice sheet topography and internal characteristics, Greenland and Antarctica. Hodge, S.M., [1986, p.237-255, eng] **41-3986**
- Ice flow history and glacial dispersal in the Labrador Trough. Klassen, R.A., et al, [1987, p.61-71, eng] **41-4009**
- Inception, growth and decay of the Laurentide Ice Sheet. Andrews, J.T., et al, [1987, p.13-15, eng] **41-4096**
- Ice sheets and the CO2 problem. Van der Veen, C.J., [1987, p.1-42, eng] **41-4136**
- Ice sheet altimetry in the Antarctic and Greenland. Brooks, R.L., [1981, 30p., eng] **41-4159**
- Radioactive cesium from the Chernobyl accident in the Greenland ice sheet. Davidson, C.I., et al, [1987, p.633-634, eng] **41-4225**
- Evidence for two zones of debris entrainment beneath the Greenland ice sheet. Sugden, D.E., et al, [1987, p.238-241, eng] **41-4227**
- Ice calving, carbon dioxide and control of ice ages. Lockwood, J.G., [1985, p.89-96, eng] **41-4276**
- Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] **41-4280**
- Shear-heating instabilities in the down-slope creep of ice sheets. Yuen, D.A., et al, [1986, p.314-320, eng] **41-4282**
- Flow law for vertical velocity and age-depth profiles in polar ice. Wolff, E.W., et al, [1986, p.366-370, eng] **41-4290**
- Dynamics and thermal regime of glaciers. Shumskii, P.A., et al, [1986, p.34-39, 152-157, rus] **41-4337**
- Glaciological investigations using the synthetic aperture radar imaging system. Bindschadler, R.A., et al, [1987, p.11-19, eng] **41-4428**
- Seasat altimeter observations of an antarctic "lake". Cudlip, W., et al, [1987, p.55-59, eng] **41-4435**
- Interpretation of radar altimeter wave forms from Arctic ice caps. Drinkwater, M.R., et al, [1987, p.60-68, eng] **41-4436**
- Ground and satellite measurement of ice sheets, Queen Maud Land. Fujii, Y., et al, [1987, p.72-75, eng] **41-4438**
- Digital radar system for echo studies on ice sheets. Schultz, D.G., et al, [1987, p.206-210, eng] **41-4459**
- Use of remote-sensing data in modelling run-off from the Greenland ice sheet. Thomsen, H.H., et al, [1987, p.215-217, eng] **41-4461**
- JARE reports bottom topography and ice cores, Queen Maud Land. Ychida, M., et al, [1987, p.221-224, eng] **41-4463**
- Determination of radionuclides in meteorites, cosmic ray exposure and age. Herpers, U., et al, [1987, p.191-195, eng] **41-4608**
- Pseudomonas bacteria from an antarctic glacial ice sheet. Sorokina, T.A., et al, [1987, p.288-297, eng] **41-4610**
- Ice shelves**
- Ross Ice Shelf oxygen isotopes and west antarctic climate history. Grootes, P.M., et al, [1986, p.49-67, eng] **41-612**
- Melting history of Antarctica during the past 60,000 years. Labeyrie, L.D., et al, [1986, p.701-706, eng] **41-616**
- Arctic ice shelf growth, fiord oceanography and climate. Jeffries, M.O., et al, [1984, p.147-153, eng] **41-631**
- Brunt Ice Shelf flow, 1974-1985, from Landsat images. Simmons, D.A., [1986, p.252-254, eng] **41-686**
- Radio-echo investigations of Ronne Ice Shelf. Crabtree, R.D., et al, [1986, p.37-41, eng] **41-735**
- Mapping edge of sea ice, Ellesmere Island, N.W.T. Jeffries, M.O., et al, [1986, p.96-99, eng] **41-747**
- Ice rumples on Ronne Ice Shelf. Smith, A.M., [1986, p.47-52, eng] **41-800**
- West Antarctic ice sheet dynamics. Van der Veen, C.J., [1985, p.732-734, eng] **41-983**
- Models of the Filchner-Ronne Ice Shelf thickness distributions. Lange, M.A., et al, [1986, p.10, 457, 10, 462, eng] **41-1022**
- Ice pumps and their rates. Lewis, E.L., et al, [1986, p.11, 756-11, 762, eng] **41-1024**
- Studying mass balance in the frontal zone of the Filchner-Ronne ice shelf, Antarctica. Kohnen, H., et al, [1986, p.136-139, 251-254, eng] **41-1069**
- Site selection for structures on a floating ice shelf, Antarctica. Sharma, S.S., [1986, p.1093-1105, eng] **41-1147**
- Morphology and sediment processes and supply from Weddell Sea floor. Anderson, J.B., et al, [1986, p.121-129, eng] **41-1278**
- Valmet Co. and the technology of Arctic shelf development. [1985, p.104-105, rus] **41-1522**
- Saturated porous layer beneath active ice stream. Blankenship, D.D., et al, [1986, p.54-57, eng] **41-1779**
- Geophysical fieldwork on the Ronne Ice Shelf. Herrod, L.D.B., et al, [1986, p.9-14, eng] **41-1786**
- Tidal spectrum underneath antarctic ice shelves. Pedley, M., et al, [1986, p.13,001-13,009, eng] **41-1859**
- Polar ice sheets: a wild card in the deck. Jacobs, S.S., [1986, p.50-54, eng] **41-1900**
- Nitrate flux on the Ross Ice Shelf and its relation to solar cosmic rays. Zeller, E.J., et al, [1986, p.1264-1267, eng] **41-2019**
- The ice: a journey to Antarctica. Pyne, S.J., [1986, 428p., eng] **41-2079**
- Technical means for thermal drilling and cutting of ice. Morev, V.A., et al, [1986, p.37-39, rus] **41-2156**
- Conditions of upbuilding and properties of artificial sea-water ice. Gagarin, V.E., et al, [1986, p.140-144, rus] **41-2156**
- Structures on a floating ice shelf in Antarctica. Sharma, S.S., [1986, p.298-311, eng] **41-2289**

## Ice shelves (cont.)

- Mean height, volume and thickness of the antarctic ice sheet. Suetova, I.A., [1986, p.217-220, rus] 41-2551
- Arctic shelf in the late Pleistocene and certain problems of paleogeology. Vozovik, I.U.I., [1986, p.449-452, eng] 41-2572
- Land ice/sea ice transition at J-9 on Ross Ice Shelf. Grootes, P.M., et al, [1985, p.66-68, eng] 41-2628
- Floating ice shelves related to ice age climates. Denton, G.H., et al, [1986, p.509-513, eng] 41-2801
- Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., [1983, 274p., eng] 41-3073
- Contribution to the study of sediments in the Bransfield Strait region. Silva Martins, L.R., et al, [1987, p.127-146, por] 41-3156
- Area of antarctic ice shelves. Suetova, I.A., [1986, p.213-226, eng] 41-3201
- New data on the position of the Bellingshausen Ice Shelf. Iakovlev, V.N., et al, [1986, p.227-231, eng] 41-3202
- Reinforced concrete for petroleum industry structures of the Arctic Shelf. Abadzhian, K.A., [1985, p.32-33, rus] 41-3205
- Paleoclimatic constraints on ice shelves in the Greenland and Norwegian seas. Lindstrom, D.R., et al, [1986, p.313-337, eng] 41-3248
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270
- West Antarctic Ice Sheet: the need to understand its dynamics. Van der Veen, C.J., [1987, p.1-16, eng] 41-3272
- On the oceanic circulation near a shelf-ice edge. Van Heijst, G.J.F., [1987, p.37-56, eng] 41-3273
- Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274
- Some aspects of the flow of the Ronne Ice Shelf. Doske, C.S.M., [1987, p.75-98, eng] 41-3275
- Unconfined ice-shelf flow. Morland, L.W., [1987, p.99-116, eng] 41-3276
- Plane and radial ice-shelf flow with prescribed temperature profile. Morland, L.W., et al, [1987, p.117-140, eng] 41-3277
- Ice-shelf backpressure: form drag versus dynamic drag. MacAyeal, D.R., [1987, p.141-160, eng] 41-3278
- Ice stream-ice shelf interaction in West Antarctica. Bindshadler, R.A., et al, [1987, p.161-180, eng] 41-3279
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] 41-3280
- On the flow within the transition zone between ice sheet and ice shelf. Herterich, K., [1987, p.185-202, eng] 41-3281
- Heat budget of the Ross drainage basin. Oerlemans, J., [1987, p.287-292, eng] 41-3285
- Modeling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] 41-3286
- Modelling the response of the West Antarctic ice Sheet to a climatic warming. Budd, W.F., et al, [1987, p.321-358, eng] 41-3287
- Coupled marine ice-stream-ice-shelf model. Muszynski, I., et al, [1987, p.3-15, eng] 41-3590
- Thickness of the Ronne Ice Shelf. Engelhardt, H., et al, [1987, p.318-319, eng] 41-3640
- Shelf: the relief, sediments and their formation. Ionin, A.S., et al, [1987, 205p. (Pertinent p.53-80), rus] 41-3688
- Antarctic ecosystem. Benninghoff, W.S., [1987, p.9-14, eng] 41-3739
- Exploitation of antarctic minerals. Crockett, R.N., et al, [1987, p.121-132, eng] 41-3741
- Ice streams draining into the Ross Ice Shelf. Shabtaie, S., et al, [1987, p.1311-1336, eng] 41-3764
- Seismic bedrock depth measurements and the origin of George VI Sound, Antarctic Peninsula. Maslanyj, M.P., [1987, p.51-65, eng] 41-3811
- Coastline changes revealed by satellite imagery. Ferrigno, J.G., et al, [1987, p.577-583, eng] 41-3856
- Flow and thickness of Riiser-Larsen, Antarctica. Orheim, O., et al, [1986, p.5-22, eng] 41-4093
- Riiser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al, [1986, p.23-31, eng] 41-4094
- Riiser-Larsen oxygen isotopes and accumulation rates. Orheim, O., et al, [1986, p.33-47, eng] 41-4095
- Chemical fractionation of brine in McMurdo Ice Shelf. Cragin, J.H., et al, [1986, p.307-313, eng] 41-4281
- Recent advance of the Ross Ice Shelf, Antarctica. Jacobs, S.S., et al, [1986, p.464-474, eng] 41-4302
- Remote sensing in the Ross Ice Shelf region. Bentley, C.R., et al, [1987, p.20-29, eng] 41-4429
- Microearthquakes of the eastern Ross Ice Shelf. Blankenship, D.D., et al, [1987, p.30-34, eng] 41-4430
- Evolution of under-water sides of ice shelves and icebergs. Orheim, O., [1987, p.176-182, eng] 41-4454
- Mapping Amery Ice Shelf. Partington, K.C., et al, [1987, p.183-188, eng] 41-4455
- Radar altimetry delineates ice shelf boundaries and elevations. Zwally, H.J., et al, [1987, p.229-235, eng] 41-4465

## Ice snow interface

See: Snow ice interface

## Ice solid interface

- Behaviour of offshore structures; Proceedings. [1985, 1012p., eng] 41-665
- Review of interaction of icebergs with offshore structures. Arunachalam, V.M., et al, [1985, p.693-704, eng] 41-668
- Response of offshore structures to bergy-bit and iceberg impacts. Arockiasamy, M., et al, [1985, p.951-961, eng] 41-671
- On the scale effect in ice mechanics. Bercha, F.G., [1977, p.65-66, eng] 41-975
- Ice fracture mechanics and some of its applications. Goldstein, R.V., et al, [1986, p.197-210, eng] 41-1096
- Field performance of an ice force panel for *in situ* and structural measurements. Witney, K.C., et al, [1986, p.241-261, eng] 41-1100
- Ice fracturing induced by offshore operations. Romagnoli, R., et al, [1986, p.399-408, eng] 41-1109
- Interaction between submerged embankment and multi-year ice floes. Larsen, O.D., [1986, p.678-692, eng] 41-1124
- Ice forces on model Arctic structures. Gowda, S.S., et al, [1986, p.693-706, eng] 41-1125
- Swedish investigations of ice-structure interaction in the Baltic. Janson, J.E., [1986, p.707-711, eng] 41-1126
- Added mass and damping coefficient for certain 'realistic' iceberg models. Bass, D.W., et al, [1986, p.163-174, eng] 41-1287
- Physical modeling in ice engineering. Ettema, R., [1986, p.57-65, eng] 41-1304
- Dynamic ship/ice impact—results of parametric model testing. Daley, C.G., et al, [1986, p.349-363, eng] 41-1604
- Ice force oscillator model for dynamic ice-structure interaction analysis. Xu, J., et al, [1986, p.391-196, eng] 41-1606
- Numerical modelling of ice-structure interaction. Chehayeb, F.S., et al, [1986, p.431-444, eng] 41-1610
- Steady-state ice-structure interaction analysis. Williams, A.N., et al, [1986, p.989-1006, eng] 41-2069
- Agenda and presentations. [1986, Var.p., eng] 41-2129
- Friction of solids on ice. Huber, N.P., et al, [1986, 4p., eng] 41-2134
- Model test study of level ice forces on cylindrical multilegged structures. Evers, K.-U., et al, [1986, p.251-275, eng] 41-2278
- MV Robert LeMour ice/propeller interaction project: full-scale data. Laskow, V., et al, [1986, p.301-319, eng] 41-2285
- Ship/ice interaction pressures and energies during ship ramming. Kivisild, H.R., et al, [1987, p.215-223, eng] 41-2424
- Ice beam moving against a sloping structure. Sodhi, D.S., [1987, p.281-284, eng] 41-2433
- Preliminary measurements of terminal crack velocity in ice. Parsons, B.L., et al, [1987, p.233-238, eng] 41-3034
- Model studies of ice interaction with ship rudders and steering systems. Menon, B., et al, [1986, 2 vols., eng] 41-3372
- Structure-ridge interaction. Gershunov, E.M., [1987, p.85-94, eng] 41-4218
- Structure-rubble field interaction. Gershunov, E.M., [1987, p.95-103, eng] 41-4219
- Digital radio echo-sounding and navigation recording system. Gorman, M.R., et al, [1987, p.81-84, eng] 41-4440
- Ice loads on the propulsion machinery of a tanker ship. Koskikivi, J., et al, [1985, 71p. + appendix, eng] 41-4598
- Ice spectroscopy
- Measurement of the extinction of water ice particles. Krättschmer, W., et al, [1985, p.149-154, eng] 41-1702
- Spectral properties of water ice and contaminants. Lucey, P.G., et al, [1985, p.155-168, eng] 41-1703
- Outer solar system materials: ices and color systematics. Hartmann, W.K., et al, [1985, p.169-181, eng] 41-1704
- Ice particle evolution in the anvil of a severe thunderstorm. Heymsfield, A.J., [1986, p.2463-2478, eng] 41-4052
- Ice storms
- Numerical simulation of an Alberta hailstorm. Yau, H.K., et al, [1984, p.585-588, eng] 41-4407
- Cloud water freezing accompanied by electrocrystallization potentials. Kolev, S., et al, [1984, p.793-796, eng] 41-4420
- Ice strength
- Strength of the natural and artificial river-water ice. Derugin, A.G., et al, [1986, p.219-222, rus] 41-138
- Note on ice scaling. Jones, N., [1986, p.134-135, eng] 41-259
- Ice strength index for model towing tanks. Baker, D.N., [1986, 40p. + appendix, 12p., eng] 41-964
- High latitude drilling in the ocean drilling program. Harding, B.W., et al, [1986, p.83-106, eng] 41-1092
- Recent developments in the analysis of floating ice plates. Vinogradov, A.M., [1986, p.228-240, eng] 41-1099
- Determination of pore ice stresses in frozen soils. Youssef, H., [1986, p.262-282, eng] 41-1101

## Controlling factors of ice-created sea floor features.

- Clark, J.I., et al, [1986, p.565-582, eng] 41-1118
- Field measurements of the adhesion strength of ice. Makkonen, L., et al, [1986, p.725-734, eng] 41-1128
- Brash ice effects on ship operations. Foraman, B., et al, [1986, p.1021-1038, eng] 41-1144
- In situ* measurements of the resistivity of antarctic sea ice. Buckley, R.G., et al, [1986, p.285-290, eng] 41-1295
- Yield and failure envelope for ice under multiaxial compressive stresses. Nadreau, J.P., et al, [1986, p.75-82, eng] 41-1306
- Army research could reduce dangers posed by sea ice. Tucker, W.B., [1984, p.20-24, eng] 41-1329
- Determining the resistance of fresh water ice to fracturing. Danilenko, V.I., [1985, p.135-140, rus] 41-1575
- Probabilistic theories for the failure of sea ice. Maes, M.A., et al, [1986, p.37-54, eng] 41-1581
- Evaluation of the rheological properties of columnar ridge sea ice. Brown, R.L., et al, [1986, p.55-66, eng] 41-1582
- Scaling in ice fracture mechanics. Atkins, A.G., [1986, p.67-73, eng] 41-1583
- High speed borehole pressuremeter to measure the crushing strength of ice. Michel, B., et al, [1986, p.187-208, eng] 41-1592
- Sea ice testing in flexure—the importance of shear deformations. Murat, J.R., et al, [1986, p.209-224, eng] 41-1593
- Sea ice strength measurements from the inner Danish waters in early 1985. Christensen, F.T., [1986, p.247-253, eng] 41-1596
- Fracture toughness of freshwater ice as a function of loading rate. Nixon, W.A., et al, [1986, p.287-296, eng] 41-1599
- Strength and ductility of ice under tension. Lee, R.W., et al, [1985, c20p., eng] 41-1679
- Rheologies of H<sub>2</sub>O ices (Ih), II, and III at high pressures: a progress report. Kirby, S.H., et al, [1985, p.89-107, eng] 41-1699
- Hugoniot of water ice. Gaffney, E.S., [1985, p.119-148, eng] 41-1701
- Shapes and strengths of small icy satellites. Farinella, P., et al, [1985, p.699-710, eng] 41-1732
- Agenda and presentations. [1986, Var.p., eng] 41-2129
- Loading effect on compressive strength of polycrystalline ice. Haerle, R.N., [1986, c25p., eng] 41-2130
- Effect of grain size distribution on the compressive strength of ice. Laughlin, J.L., [1986, c17p., eng] 41-2131
- Tensile strength of ice with preexisting cracks. Hoxie, S., [1986, 7p., eng] 41-2132
- Effects of rate, temperature and microstructure on ice cracks. Nixon, W.A., [1986, 6p., eng] 41-2133
- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., [1986, p.92-94, rus] 41-2161
- Strength of granular ice. Derugin, A.G., et al, [1986, p.129-134, rus] 41-2165
- Strength of reinforced-ice materials. Derugin, A.G., et al, [1986, p.135-139, rus] 41-2166
- Broadening the use of ice and snow in construction. Volkovskii, K.F., [1986, p.159-162, rus] 41-2170
- Fracture toughness of single crystal ice and columnar grained ice. Kusumoto, S., et al, [1985, p.19-27, jpn] 41-2186
- Fracture toughness and macrofractography of single crystal ice. Uchida, T., et al, [1986, p.107-112, jpn] 41-2187
- Viscoelasticity of ice under different loading conditions. Hamza, H., [1987, p.151-157, eng] 41-2416
- Compressive strength of ice with bimodal distribution of grain sizes. Laughlin, J.L., et al, [1987, p.167-172, eng] 41-2418
- Experimental investigations on scale effect of Bohai sea ice. Shen, W., et al, [1987, p.173-179, eng] 41-2419
- Confined compressive strength of horizontal first-year sea ice samples. Richter-Menge, J.A., [1987, p.197-207, eng] 41-2422
- Effect of sub-surface irregularities on the strength of multi-year ice. Hallam, S.D., et al, [1987, p.225-238, eng] 41-2426
- Determination of mechanical properties of ice by quantum statistical approach and experiments. Schwarz, J., et al, [1987, p.245-252, eng] 41-2428
- Reference strength of ice to be used in designing offshore structures. Tunik, A.L., [1987, p.285-290, eng] 41-2434
- Triaxial testing of first-year sea ice. Richter-Menge, J.A., et al, [1986, 41p., eng] 41-2547
- Compressive behavior of saline ice. Richter-Menge, J.A., [1986, p.331-350, eng] 41-2664
- Compressive strength of saline ice. Blair, S.C., [1986, p.351-364, eng] 41-2665
- Saline ice under explosive loads and penetration of sea ice. Larson, D.B., [1986, p.365-384, eng] 41-2666
- Kinetic energy ice penetrating tactical sonobuoy. Everett, R.N., et al, [1986, p.521-547, eng] 41-2675
- Ice penetration drill/anchor using ultrahigh-pressure waterjets. Echert, D.C.S., et al, [1986, p.605-617, eng] 41-2679
- Project ice buster. Miles, R.T., et al, [1986, p.623-643, eng] 41-2681

- Structure and mechanical properties of artificial ice.  
Savel'ev, B.A., et al, [1986, p.169-176, rus] 41-2837
- Sea ice operation: McMurdo Sound-Granite Harbour.  
Pyne, A.R., [1986, p.5-13, eng] 41-2870
- Advances in ice mechanics—1987. [1987, 49p., eng] 41-2929
- Advances in ice mechanics in the United Kingdom.  
Hallam, S.D., et al, [1987, p.1-5, eng] 41-2930
- Recent advances in ice mechanics in Canada. Sinha, N.K., et al, [1987, p.15-35, eng] 41-2932
- Advances in sea ice mechanics in the USA. Sodhi, D.S., et al, [1987, p.37-49, eng] 41-2933
- Determination of crack resistance of freshwater ice.  
Danilenko, V.I., [1985, p.131-136, eng] 41-2972
- Mechanical behavior of sea ice. Mellor, M., [1986, p.165-281, eng] 41-2988
- Some developments in shaped charge technology. Mellor, M., [1986, 29p., eng] 41-3049
- Resistance of ice models in a test channel. Baker, D.N., [1986, 15p., frey] 41-3244
- Temperature and time dependence of frozen ground strength. Konovalov, A.A., [1986, p.74-84, rus] 41-3396
- Grounded ice island—field and laboratory research interim report. Duthweiler, F.C., et al, [1986, 29p. + 3 appends., eng] 41-3422
- Pack ice/rubble field interaction study, Issungnak 1980. [1981, 88p. + appends., eng] 41-3550
- Ice forces on conical offshore structures. Kolymbas, D., [1987, p.217-231, eng] 41-3572
- Breaking of ice during impact interactions. Epifanov, V.P., [1985, p.799-801, eng] 41-3629
- Impact experiments in low-temperature ice. Lange, M.A., et al, [1987, p.506-518, eng] 41-4177
- See also: Ice cover strength
- Ice structure**
- Book review. G.I. Smorygin. Theoretical basis for obtaining loose-structure ice. Sosnovskii, A.V., [1986, p.231-234, rus] 41-141
- Sea ice fields in the Barents Sea. Vinje, T.E., [1985, 26p. + map, eng] 41-247
- Combined optical and radar methods for studying the environment. Shestopalov, V.P., et al, [1984, p.963-964, eng] 41-515
- Repetitive regularities of water structure in ices and crystalline hydrates. Savage, H.F., et al, [1986, p.717-720, eng] 41-617
- Moisture in hygroscopic materials. Efimov, S.S., [1986, 160p., rus] 41-1044
- Indentation tests of laboratory and field ice sheets. Kawasaki, T., et al, [1986, p.712-724, eng] 41-1127
- Scale effect in ice. Gershunov, E.M., [1986, p.277-284, eng] 41-1294
- Lithogenesis of ground ice. Solomatina, V.I., [1986, 216p., rus] 41-1342
- Nonlinear constitutive model for ice. Szyzkowski, W., et al, [1985, p.307-321, eng] 41-1357
- Composition and structure of the comet nucleus. Klinger, J., [1985, p.407-417, eng] 41-1715
- Origin of some buried ice forms in the Yamal tundra. Krass, M.S., et al, [1986, p.66-75, rus] 41-1793
- Structure and dielectric properties at 4.8 and 9.5 GHz of saline ice. Arcone, S.A., et al, [1986, p.14,281-14,303, eng] 41-1857
- Biogenic and mineral inclusions in a green iceberg from the Weddell Sea. Dieckmann, G., et al, [1987, p.31-33, eng] 41-1975
- Folding in the Greenland ice sheet. Whillans, I.M., et al, [1987, p.485-493, eng] 41-1976
- Observations of grain boundary sliding in ice bicrystals. Graves, J.H., [1986, cl.2p., eng] 41-2133
- Metamorphism and thermophysical properties of friable ice. Smorygin, G.I., [1986, p.106-121, rus] 41-2163
- Strength of granular ice. Derugin, A.G., et al, [1986, p.129-134, rus] 41-2165
- Firn studies at upstream B, Siple Coast. Alley, R.B., et al, [1985, p.65-66, eng] 41-2627
- On the profile properties of undeformed first-year sea ice. Cox, G.F.N., et al, [1986, p.257-330, eng] 41-2663
- Remote sensing of the Fram Strait marginal ice zone. Shuchman, R.A., et al, [1987, p.429-431, eng] 41-2803
- Physical properties of sea ice discharged from Fram Strait. Gow, A.J., et al, [1987, p.436-439, eng] 41-2806
- On positronium formation in crystalline and amorphous ice at low positron energy. Mogensen, O.E., [1986, p.357-362, eng] 41-3070
- Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1985, 259p., rus] 41-3534
- Problems in automation of geophysical investigations. Collection of works. Deviatits'nyi, A.S., ed, [1985, 162p., rus] 41-3543
- Classification of sea ice according to structural characteristics. Aleksanina, M.G., [1985, p.52-58, rus] 41-3544
- Mechanism of basal ice layer formation. Tison, J.L., et al, [1987, p.47-50, eng] 41-3594
- Description of tabular ground ice outcropping in the Ledyanaya Gora. Viurina, B.I., et al, [1986, p.273-285, eng] 41-3618
- Relief and deposits of the Severnaya Zemlya islands. Makeev, V.M., et al, [1986, p.331-338, eng] 41-3625
- Amorphous ice still a puzzle. Maddox, J., [1987, p.823, eng] 41-3638
- Pressure-induced phase transformations in ice. Tse, J.S., et al, [1987, p.1672-1675, eng] 41-3645
- Microstructural characteristics of hailstone embryos. Tisov, M.I., et al, [1986, p.229-237, rus] 41-3672
- Glaciological characteristics of an ice core in Patagonia. Yamada, T., [1987, p.59-67, eng] 41-3828
- Structural and morphological characteristics of Soler Glacier, Patagonia. Aniya, M., et al, [1987, p.69-77, eng] 41-3829
- All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] 41-3974
- Regionalization of the permafrost zone for environmental protection purposes. Chizhov, A.V., et al, [1986, p.39, rus] 41-3975
- Sea ice structure and mechanical properties. Richter-Menge, J.A., et al, [1987, 30p., eng] 41-4143
- Sea ice morphology in the Fram Strait and Greenland Sea from remote sensing data. Campbell, W.J., et al, [1987, p.6805-6824, eng] 41-4239
- Measurement of firn structure. Alley, R.B., [1986, p.391-396, eng] 41-4294
- Grain growth in polar ice: Pts. 1 and 2. Alley, R.B., et al, [1986, p.415-433, eng] 41-4297
- Texture of polar firn for remote sensing. Alley, R.B., [1987, p.1-4, eng] 41-4426
- Morphology and kinematics of Arctic sea ice. Lee, M., et al, [1987, p.92-96, eng] 41-4442
- Ice sublimation**
- Residues from dispersions of clay and ice on Martian polar deposits. Saunders, R.S., et al, [1986, p.94-104, eng] 41-527
- Role of evaporation from snow and ice in mass balance of glaciers. Kaser, G., [1986, p.59-63, 185-188, eng] 41-1036
- Snow sublimation temperature of the cometary nucleus. Delsemme, A.H., [1985, p.367-387, eng] 41-1712
- Effect of dust halos and dust mantles on nuclear outgassing. Mendis, D.A., [1985, p.487-504, eng] 41-1720
- Geographic modeling of evaporation from water-bodies of mountainous countries. Gvakharia, V.K., [1986, 114p., rus] 41-3366
- Outward flux of vapour from frozen soils at Mayo, Yukon, Canada: results and interpretation. Smith, M.W., et al, [1987, p.143-152, eng] 41-4491
- Ice surface**
- Ice features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al, [1986, p.168-170, eng] 41-411
- All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings. [1986, 236p., rus] 41-702
- Atmosphere and snow cover effects on emissive properties of ice. Pichugin, A.P., et al, [1986, p.119-123, rus] 41-703
- Problems of technical tribology in Arctic service conditions. Cherskil, I.N., et al, [1986, p.779-792, eng] 41-1132
- Deflation of salts from ice surface in the Aral Sea. Tsytsarin, A.G., [1986, p.62-69, rus] 41-1971
- Effect of orographic shadowing on satellite imagery of snow and ice. McGuffie, K., et al, [1986, p.1359-1365, eng] 41-2140
- Convective heat- and mass transfer between artificial ice and the atmosphere. Likhtenshtein, E.L., [1986, p.10-16, rus] 41-2147
- Metamorphism and thermophysical properties of friable ice. Smorygin, G.I., [1986, p.106-121, rus] 41-2163
- Theory for scalar roughness and transfer coefficients over snow and ice. Andreas, E.L., [1987, p.159-184, eng] 41-2364
- Radar backscatter from summer and ridged sea ice, and design of short-range radars. Gogineni, S.P., [1985, 142p., eng] 41-2580
- Discrimination of different arctic snow and sea ice surfaces. Welsh, J.P., et al, [1986, p.31-56, eng] 41-2654
- JARE-27 field report, Sør Rondane Mountains, 1986. Moriaki, K., et al, [1986, p.246-281, jpn] 41-2695
- MIZEX 84 ice surface measurements from the FS *Polarstern*. Burns, B.A., et al, [1986, p.30-40, eng] 41-3057
- West Antarctic Ice Sheet: the need to understand its dynamics. Van der Veen, C.J., [1987, p.1-16, eng] 41-3272
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] 41-3280
- Ice conditions at Issungnak, 1978-79. Shinde, S.B., [1981, 25p. + appends, eng] 41-3361
- Ice features and movement north of Ellesmere Island, Canada. Nordlund, O.P., et al, [1987, p.32-43, eng] 41-3371
- Scientific challenges at the poles. Welch, J.P., et al, [1987, p.23-26, eng] 41-3408
- Natural shoal rubble pile study, Beaufort Sea, March-April 1979. McGonigal, D., et al, [1986, 36p. + figs., appends., eng] 41-3548
- Rubble field study, Issungnak, 1979-80. Vol.1. Executive summary report. McGonigal, D., [1983, 38p., eng] 41-3549
- Ice stress panel results, Issungnak 1980. McGonigal, D., [1981, 14p. + figs., eng] 41-3553
- Surface windfield over the antarctic ice sheet. Pariash, T.R., et al, [1987, p.51-54, eng] 41-3683
- Ice streams draining into the Ross Ice Shelf. Shabtaie, S., et al, [1987, p.1311-1336, eng] 41-3764
- Oil spill effect on melting temperature of sea ice. Izmailov, V.V., [1986, p.113-117, rus] 41-3868
- Albedo and heat balance of oil-polluted ice-snow surfaces. Izmailov, V.V., et al, [1986, p.117-120, rus] 41-3869
- Dynamical properties of ice surfaces studied by nuclear magnetic resonance. Mizuno, Y., et al, [1986, p.1-10, jpn] 41-3874
- Observation of the surface roughness of sea ice using an X-band radar. Aota, M., et al, [1986, p.45-58, jpn] 41-3879
- Wind stress over rough ice in the ice edge zone, 1984. Anderson, R.J., [1987, p.6933-6941, eng] 41-4249
- Effect of ice conditions on the drag coefficient in the Greenland Sea ice edge zone. Guest, P.S., et al, [1987, p.6943-6954, eng] 41-4250
- Wave ogives. Waddington, E.D., [1986, p.325-334, eng] 41-4284
- Mass balance of the McCall glacier in Alaska. Trabant, D.C., et al, [1986, p.40-49, 157-165, rus] 41-4338
- Meltwater seepage on temperate and cold glaciers. Bazhev, A.B., [1986, p.50-55, 165-170, rus] 41-4339
- Mapping Amery Ice Shelf. Partington, K.C., et al, [1987, p.183-188, eng] 41-4455
- See also: Glacier surfaces
- Ice surveys**
- Radar sounding of ice on fresh-water bodies. Klemato, K.I., et al, [1986, p.134-138, rus] 41-122
- Icebergs: a bibliography relevant to eastern Canadian waters. Howard, L.M., ed, [1986, 277p., eng] 41-271
- Systems and means of oceanic radio-communication. Panin, I.U.I., ed, [1984, 144p., rus] 41-557
- Satellites for collecting information from automatic hydrometeorological stations. Denisov, S.I., et al, [1984, p.85-88, rus] 41-559
- Mapping edge of sea ice, Ellesmere Island, N.W.T. Jeffries, M.O., et al, [1986, p.96-99, eng] 41-747
- SAR for real-time ice reconnaissance. Nichols, A.D., et al, [1986, p.383-389, eng] 41-835
- Model of the Barnes Ice-Cap derived from Landsat MSS data. Lodwick, G.D., et al, [1985, p.1937-1944, eng] 41-968
- Recent developments at the Arctic Science and Technology Information System. Goodwin, R., [1986, p.145-148, eng] 41-972
- Recent fluctuations of mountain glaciers in the Northern Hemisphere. Makarevich, K.G., et al, [1986, p.25-33, 157-163, eng] 41-1050
- Ten questions and eight answers for problems of snow and ice. Kojima, K., [1986, p.159-167, jpn] 41-1220
- Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al, [1986, p.3920-3924, eng] 41-1361
- Effectiveness of thermal viewing equipment for ice surveying. Ovsiannikov, V.A., [1985, p.82-83, rus] 41-1406
- Sea ice measurements at Davis Station. Zhang, Q., [1986, p.143-148, chj] 41-1461
- Eastern Snow Conference, 42nd, 1985. [1985, 303p., eng] 41-1479
- Development and roles of the Eastern Snow Conference. Adams, P., et al, [1985, p.1-24, eng] 41-1480
- Snow and ice in Inuit place names in the eastern Canadian Arctic. Müller-Wille, L., [1985, p.55-57, eng] 41-1484
- Microwave remote sensing—active and passive. Ulaby, F.T., et al, [1981, 2162p. (3 vols.), eng] 41-1508
- Eastern Snow Conference, 41st, 1984. [1984, 248p., eng] 41-1941
- Ice in the Azov Sea. Fomicheva, L.A., [1986, p.3-10, rus] 41-1970
- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, [1986, 160p., rus] 41-2714
- Methods of compiling general radar maps of polar regions. Bondina, T.V., et al, [1986, p.58-63, rus] 41-2717
- Yearbook of the Norwegian Polar Research Institute, 1985. [1985, p.12-15, eng] 41-2888
- First time above the North Pole. Stromilov, N.N., [1986, 134p., rus] 41-3014
- Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship. Makshtas, A.P., et al, [1986, p.139-145, eng] 41-3265
- Huurre expedition to the North Pole in 1984. Nordlund, O.P., ed, [1987, 52p., eng] 41-3368
- Determining some characteristics of fast and drifting ice with the meteorological radar-2 station. Komarov, A.V., et al, [1985, p.66-70, rus] 41-3430
- Contemporary methods in antarctic cartography. Reshetov, E.A., et al, [1986, p.23-25, rus] 41-3533
- Science and public policy: program and abstracts of the conference. [1984, 251p., eng] 41-3615

**Ice surveys (cont.)**

Ten questions and eight answers for problems of snow and ice (continued). Kojima, K., [1987, p.19-26, jpn] 41-3755

Ice cap's marginal zone in connection with hydraulic power research. Thomsen, H.H., [1983, 24p., dan] 41-3893

Summaries of the International Symposium on Remote Sensing of Environment, 18th. [1985, 251p., eng] 41-3962

International Symposium on Remote Sensing of Environment, 19th, 1985. [1986, 1101p. (2 vols.), eng] 41-3985

Future satellite systems for oceanic and cryospheric observations. Sherman, J.W., III, [1986, p.257-267, eng] 41-3987

Airborne observations of terrestrial surfaces. Egan, W.G., [1986, p.501-510, eng] 41-3988

Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124

Space-time variations in ice conditions of the Barents, White and Baltic seas. Sheremetevskaia, O.I., [1986, p.88-93, rus] 41-4200

Digital radio echo-sounding and navigation recording system. Gorman, M.R., et al, [1987, p.81-84, eng] 41-4440

Climatic atlas, including freezing precipitation. [1987, 3p. + 108p. of maps, eng] 41-4522

Organization and activities of the Research Institute for Hazards in Snowy Areas, Niigata University. [1985, p.223-255, jpn] 41-4589

United States Arctic Research Plan. [1987, 334p., eng] 41-4597

Estimating the effect of atmospheric precipitation on sea-ice radar images. Aleksandrov, V.I.U., [1987, p.37-43, rus] 41-4619

See also: Ice reporting

**Ice temperature**

Finite element modeling of glaciers. Nixon, W.A., et al, [1985, p.11,303-11,311, eng] 41-495

Computation of ice cover thermal emission. Brekhovskikh, V.L., [1985, p.574-581, eng] 41-822

Seasonal ice extent on the northeast Newfoundland Shelf. Symonds, G., [1986, p.10,718-10,724, eng] 41-1011

Studying the sensitivity of mass-balance model including calculations of temperature profile inside the glacier. Gruell, W., et al, [1986, p.34-38, 164-168, eng] 41-1051

Effectiveness of thermal viewing equipment for ice surveying. Ovsiannikov, V.A., [1985, p.82-83, rus] 41-1406

Core temperature measurements on three Arctic icebergs. Goodrich, L.E., [1987, p.103-107, eng] 41-2409

Thermophysics of glaciers. Zotikov, I.A., [1986, 275p., eng] 41-2565

Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., [1983, 274p., eng] 41-3073

Unconfined ice-shelf flow. Morland, L.W., [1987, p.99-116, eng] 41-3276

Plane and radial ice-shelf flow with prescribed temperature profile. Morland, L.W., et al, [1987, p.117-140, eng] 41-3277

Heat budget of the Ross drainage basin. Oerlemans, J., [1987, p.287-292, eng] 41-3285

Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] 41-3286

Modelling the response of the West Antarctic Ice Sheet to a climatic warming. Budd, W.F., et al, [1987, p.321-358, eng] 41-3287

Tabular body of ground ice in the Ledianaya Gora outcrop. Karpov, E.G., [1986, p.267-272, eng] 41-3617

Small-scale interaction between atmosphere and ocean at Maud Rise. Makshtas, A.P., et al, [1986, p.67-71, rus] 41-4189

Ice flora in the central part of the Arctic Ocean. Mel'nikov, I.A., [1986, p.59-62, rus] 41-4197

Simulation of Erebus Glacier Tongue thermal regime. Stolle, D.F.E., et al, [1986, p.530-534, eng] 41-4309

Fractures in arctic winter pack ice (North Water, northern Baffin Bay). Steffen, K., [1987, p.211-214, eng] 41-4460

**Ice thermal properties**

Role of debris cover in the thermal physics of glaciers. Bozhinskii, A.N., et al, [1986, p.255-266, eng] 41-687

Effect of brine on sea ice heat conductivity. Nazintsev, I.U., [1986, p.107-115, rus] 41-1266

Thermal analysis of heat flow in ice rinks. Gregoire, G.B., et al, [1986, p.263-285, eng] 41-1598

Deriving the ice sheet evolution equations. Grigorian, S.S., et al, [1984, p.892-903, eng] 41-2074

Broadening the use of ice and snow in construction. Volkovskii, K.F., [1986, p.159-162, rus] 41-2170

Thermophysics of glaciers. Zotikov, I.A., [1986, 275p., eng] 41-2565

High-density amorphous ice. 3. Thermal properties. Handa, Y.P., et al, [1986, p.2766-2770, eng] 41-2570

Growth, structure, and properties of sea ice. Weeks, W.F., et al, [1986, p.9-164, eng] 41-2987

Temperature variation of the thermal properties of ice. Osterkamp, T.E., et al, [1987, 10p. + figs, eng] 41-3238

Thermomechanical balances of ice sheet flows. Morland, L.W., [1984, p.237-266, eng] 41-3791

**Ice thickness**

See: Glacier thickness; Ice cover thickness

**Ice tongues**

See: Glacier tongues

**Ice transported material**

See: Ice rafting

**Ice tunnels**

Basal sliding and drift deformation in a China glacier. Echelmeyer, K., et al, [1987, p.83-98, eng] 41-3601

Research in the tunnel of Urumqi Glacier No.1. Huang, M., et al, [1987, p.99-104, eng] 41-3602

**Ice underside**

See: Ice bottom surface

**Ice veins**

Climatic reconstructions from geocryological data. Danilov, I.D., et al, [1986, p.61-65, rus] 41-106

Possibilities of oxygen-isotope technique in studying ground ice. Arkhangelov, A.A., et al, [1986, p.88-92, rus] 41-111

Significance of variations in ice-wedge forms. Vtiurina, E.A., et al, [1986, p.190-194, rus] 41-133

Lithogenesis of ground ice. Solomatina, V.I., [1986, 216p., rus] 41-1342

Ground ice study in its present stage (based on Soviet publications). Vtiurin, B.I., [1986, p.193-197, rus] 41-1667

Glacier ice in Quaternary deposits of the Mal'k-Siyenskaya basin. Bepalyi, V.G., et al, [1984, p.107-116, rus] 41-1911

Peculiarities of studying the Pleistocene Edoma series of the northeastern USSR. Tomirdario, S.V., et al, [1984, p.159-173, rus] 41-1912

Origin of Edoma deposits. Zhestkova, T.N., et al, [1986, p.108-113, rus] 41-2090

Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka). Kotov, A.N., et al, [1986, p.114-120, rus] 41-2091

Pseudomorphs of wedge ice in the Mayn River valley (Central Chukotskiy Peninsula). Kotov, A.N., [1986, p.54-62, rus] 41-2544

Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000. Kudoiarov, L.I., [1986, p.13-23, rus] 41-3441

Climatic reconstructions from geocryological data. Danilov, I.D., et al, [1986, p.303-308, eng] 41-3621

Development of ice-wedge polygon formations. Romanovskii, N.N., [1972, p.33-41, rus] 41-3747

Development of ice-vein pseudomorphs in the Russian plain. Minervin, A.V., et al, [1986, p.90-100, rus] 41-4469

See also: Ground ice; Ice wedges

**Ice volume**

Ice balance and ice resources of the world ocean. Lebedev, A.A., [1986, p.112-118, rus] 41-117

Calculation and prediction of the regime and distribution of mountain glaciers. Tokmagambetov, G.A., et al, [1985, 159p., rus] 41-518

Mass balance and trends in glacier changes in the USSR. Akbarov, A.A., et al, [1986, p.43-59, rus] 41-775

Changes in glacial runoff of Central Asian rivers in relation to possible climatic variations. Glazyrin, G.E., et al, [1986, p.59-70, rus] 41-776

Water resources in glaciers of the Syrdaria River basin. Akbarov, A.A., et al, [1986, p.80-88, rus] 41-778

New formula for calculating the volume of mountain glaciers. Mazo, A.B., et al, [1986, p.88-98, rus] 41-779

Mass balance of Golubin Glacier. Ermolov, A.A., et al, [1986, p.98-102, rus] 41-780

Problem of glacier mass balance and its significance for glaciology. Kotliakov, V.M., [1986, p.4-8, 140-144, eng] 41-1046

Computations of mass balance in glacier systems. Diurgerov, M.B., [1986, p.8-15, 144-148, eng] 41-1047

Studying mass balance in the frontal zone of the Filchner-Ronne ice shelf, Antarctica. Kohnen, H., et al, [1986, p.136-139, 251-254, eng] 41-1069

Latest Miocene delta O-18 changes, ice volume and sea level. Hodell, D.A., et al, [1986, p.411-414, eng] 41-1174

Ice balance of Lake Baykal during ice breakup. Moskalov, V.F., [1982, p.180-187, rus] 41-1277

Formulas for calculating sea ice volume in the Arctic Ocean. Mironov, E.U., [1986, p.69-72, rus] 41-1640

Mean height, volume and thickness of the antarctic ice sheet. Sutova, I.A., [1986, p.217-220, rus] 41-2551

Using satellite survey data for studying mass transfer in glacial systems. Nosenko, G.A., [1986, p.26-31, rus] 41-3211

Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274

Contemporary methods in antarctic cartography. Reshetov, E.A., et al, [1986, p.23-25, rus] 41-3533

Tabular body of ground ice in the Ledianaya Gora outcrop. Karpov, E.G., [1986, p.267-272, eng] 41-3617

Ice balance of the world's oceans. Lebedev, A.A., [1986, p.322-330, eng] 41-3624

Volume expansion of a 413.5-m Mizuho core after its recovery. Nakawo, M., [1986, p.78-85, eng] 41-3661

JARE-25 oceanographic and marine biological data, Feb. 1984-Jan. 1985. Matsuda, O., et al, [1987, 21p., eng] 41-3667

Sea ice ridges in the Gulf of Bothnia. Zakrzewski, W.P., [1986, p.131-144, eng] 41-3759

Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, [1986, 136p., rus] 41-3805

Calculation of ice volume of some mountain glaciers. Bakov, E.K., [1986, p.3-11, rus] 41-3806

Flow and thickness of Riiser-Larsenisen, Antarctica. Orheim, O., et al, [1986, p.5-22, eng] 41-4093

Amount of ice and heat required for its melting in the Far-Eastern seas of the USSR. Iakunin, L.P., [1986, p.93-96, rus] 41-4201

Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] 41-4280

Recent advance of the Ross Ice Shelf, Antarctica. Jacobs, S.S., et al, [1986, p.464-474, eng] 41-4302

Forecasting glacial runoff in river basins of Central Asia. Kononov, V.G., [1986, p.75-78, 187-191, rus] 41-4344

Ice volumes on Cascade volcanoes. Driedger, C.L., et al, [1986, 28p., eng] 41-4638

**Ice water interface**

Naled ice growth. Schohl, G.A., et al, [1986, 187p., eng] 41-80

Large-scale ice-ocean modeling. Hibler, W.D., III, [1986, p.165-184, eng] 41-148

Coupled ice-mixed layer model for the Greenland Sea. Houssais, M.N., [1986, p.225-260, eng] 41-150

Flow patterns generated by an ice keel in stratified flow. Topham, D.R., et al, [1986, p.328-349, eng] 41-154

Buoyancy induced flows in cold pure and saline water. Qureshi, Z.H., et al, [1986, p.1383-1392, eng] 41-565

All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings. [1986, 236p., rus] 41-702

Atmosphere and snow cover effects on emissive properties of ice. Pichugin, A.P., et al, [1986, p.119-123, rus] 41-703

Regularities governing glacier fluctuations in the Eurasian Arctic. Kislov, A.V., et al, [1986, p.120-125, 236-241, eng] 41-1066

Effect of mass balance changes on fluctuations of an ice sheet interacting with the sea. Petrov, V.N., et al, [1986, p.131-136, 247-250, eng] 41-1068

Effectiveness of thermal viewing equipment for ice surveying. Ovsiannikov, V.A., [1985, p.82-83, rus] 41-1406

Turbulent free convection on a large vertical icewall in seawater. Gominho, L.C., et al, [1984, 7p., eng] 41-1787

Dynamics of temperature fields during accretion of floating ice. Bondarev, E.A., et al, [1986, p.39-42, rus] 41-2152

Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al, [1986, 63p., rus] 41-2362

Investigation of melting ice in an isothermal horizontal cylinder. Riviere, P., et al, [1987, p.155-165, eng] 41-2881

Ross Sea oceanography, 1985. Pillsbury, R.D., et al, [1985, p.112-113, eng] 41-2951

Geophysics of sea ice. [1986, 1196p., eng] 41-2985

Atmospheric boundary layer. McBean, G., [1986, p.283-337, eng] 41-2989

Diagnostic studies of large-scale air-sea interactions. Walsh, J.E., [1986, p.755-784, eng] 41-2998

Stochastic description of atmosphere-sea ice-ocean interaction. Lemke, P., [1986, p.785-823, eng] 41-2999

Note on estimating melt rate in the MIZ. McPhee, M.G., [1986, p.1-6, eng] 41-3053

Kinematics of marginal ice: MIZEX 83. Ito, H., [1986, p.7-16, eng] 41-3054

Air-ice-ocean coupled model for the formation of leads or polynyas. Chu, P.C., [1986, p.79-88, eng] 41-3061

Sea ice dynamics. Mathematical models. Timokhov, L.A., et al, [1987, 272p., rus] 41-3145

Ocean-atmosphere interactions and climatic changes in Northern Hemisphere. Nikolskii, I.U.V., ed, [1986, 163p., eng] 41-3262

Results of modeling high latitude climates. Nagurnyi, A.P., [1986, p.21-32, eng] 41-3263

Studies of ice-edge zones of Arctic seas. Nikolaev, I.U.V., et al, [1986, p.131-138, eng] 41-3264

Studies of the upper sea layer beneath the ice edge. Ivanov, B.V., et al, [1986, p.146-150, eng] 41-3266

Studying sea-atmosphere interactions during the cold season. Bogorodskii, P.V., et al, [1986, p.151-157, eng] 41-3267

Realization of the ice point. Georgiuss, R.S., [1986, p.573-575, eng] 41-3304

Ice formation in a curved channel and heat transfer at water-ice interface. Ishimiya, K., et al, [1987, p.294-301, eng] 41-3401



- Laboratory investigation of the melting of ice by induced convection. Bogorodskii, V.V., et al, [1986, p.94-96, eng] 41-3682
- Raman scattering spectra at the water-ice phase transition. Glushkov, S.M., et al, [1986, p.836-839, rus] 41-3686
- Experiments on melting of unfixed ice in a horizontal cylindrical capsule. Webb, B.W., et al, [1987, p.454-459, eng] 41-3756
- Oil spill effect on melting temperature of sea ice. Izmailov, V.V., [1986, p.113-117, rus] 41-3868
- Melting of ice layer by effect of temperature and aqua-solvent. Sugawara, M., et al, [1987, p.227-232, eng] 41-3963
- Ice flora in the central part of the Arctic Ocean. Mel'nikov, I.A., [1986, p.59-62, rus] 41-4197
- Diagnostic ice-ocean model. Hibler, W.D., III, et al, [1987, p.987-1015, eng] 41-4208
- Summer marginal ice zone experiments in the Fram Strait and Greenland Sea. Johannessen, O.M., [1987, p.6716-6718, eng] 41-4231
- Eddies in the Fram Strait marginal ice zone, 1983 and 1984. Johannessen, J.A., et al, [1987, p.6754-6772, eng] 41-4235
- Eddy near the Molloy Deep revisited. Bourke, R.H., et al, [1987, p.6773-6776, eng] 41-4236
- Numerical modelling of hail to rain conversion. Joe, P., et al, [1984, p.261-265, eng] 41-4396
- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed, [1984, 24p., rus] 41-4503
- Interaction of sea waves with discrete ice floes. Kobayashi, N., et al, [1987, 88p., eng] 41-4601
- Ice (water storage)**
- Ice balance and ice resources of the world ocean. Lebedev, A.A., [1986, p.112-118, rus] 41-117
- Cartographic problems of applied glaciology. Alekseev, V.R., [1986, p.144-146, rus] 41-1657
- Ice balance of the world's oceans. Lebedev, A.A., [1986, p.322-330, eng] 41-3624
- Calculation of ice volume of some mountain glaciers. Bakov, E.K., [1986, p.3-11, rus] 41-3806
- Ice wedges**
- Possibilities of oxygen-isotope technique in studying ground ice. Arkhangelov, A.A., et al, [1986, p.88-92, rus] 41-111
- Significance of variations in ice-wedge forms. Vtiurina, E.A., et al, [1986, p.190-194, rus] 41-133
- Permafrost and ice-wedge growth. Worsley, P., [1986, p.683-684, eng] 41-615
- Dating ice-wedge growth in subarctic peatlands following deforestation. Payette, S., et al, [1986, p.724-727, eng] 41-618
- Ground ice study in its present stage (based on Soviet publications). Vtiurin, B.I., [1986, p.193-197, rus] 41-1667
- Pseudomorphs of wedge ice in the Mayn River valley (Central Chukotka Peninsula). Kotov, A.N., [1986, p.54-62, rus] 41-2544
- Cryogenic-inversion ridges of northwestern Siberia. Bolikhovskii, V.F., et al, [1986, p.128-132, rus] 41-2829
- Cryogenic processes in the formation of swamp microrelief. Maksimova, L.N., et al, [1986, p.147-151, rus] 41-2833
- Ice wedge growth at Illisarvik experimental drained lake site. Mackay, J.R., [1986, p.1782-1795, eng] 41-2963
- Report of the third Chinese conference on permafrost. Péwé, T.L., [1986, p.89-95, eng] 41-3529
- Development of ice-wedge polygon formations. Romanovskii, N.N., [1972, p.33-41, rus] 41-3747
- Oxygen isotope composition of syngenetic ice wedges (analytical data, problems of paleoclimatic reconstruction). Vasil'chuk, I.U.K., et al, [1986, p.107-119, rus] 41-3775
- Ice-wedge casts in the Severn estuary, S.W. Britain. Allen, J.R.L., [1987, p.109-118, eng] 41-4520
- See: Ground ice; Ice veins
- Ice wood friction**
- See: Wood ice friction
- Iceberg towing**
- Iceberg stability—an error analysis. Bass, D.W., et al, [1986, p.49-55, eng] 41-1303
- Rope-stretching iceberg arrestor. Loire, R., et al, [1986, p.469-478, eng] 41-1613
- Ice penetration drill/anchor using ultrahigh-pressure waterjets. Echert, D.C.S., et al, [1986, p.605-617, eng] 41-2679
- They tow icebergs. LeBlanc, J., [1987, p.2-7, eng] 41-3530
- Icebergs**
- Ice balance and ice resources of the world ocean. Lebedev, A.A., [1986, p.112-118, rus] 41-117
- Long-range prediction of iceberg severity in the Labrador Sea. Wittman, W.I., et al, [1986, p.355-385, eng] 41-155
- Evaluation of the international ice patrol drift model. Murphy, D.L., et al, [1986, p.387-409, eng] 41-156
- Iceberg severity revisited. Marko, J.R., et al, [1986, p.413-428, eng] 41-157
- Iceberg splitting and its implications for deterioration modelling. Diemand, D., et al, [1986, p.429-440, eng] 41-158
- On the deterioration of a grounded iceberg. Venkatesh, S., [1986, p.442-471, eng] 41-159
- Temperature, salinity and density profiles around icebergs in the Labrador Sea. Pearson, D.E., [1986, p.472-491, eng] 41-160
- Side-looking airborne radar detection and identification of icebergs. Edwards, N.C., Jr., et al, [1986, p.546-554, eng] 41-165
- Iceberg information service of environment Canada. Falkingham, J.C., [1986, p.557-560, eng] 41-166
- Ice and ice management on the Grand Bank. Ransom, J.A.N., et al, [1986, p.561-582, eng] 41-167
- Iceberg detection by radar. Miller, J.D., et al, [1985, p.405-410, eng] 41-218
- Acoustic noise measurements of icebergs. Miller, J.D., et al, [1985, p.460-463, eng] 41-228
- Icebergs: a bibliography relevant to eastern Canadian waters. Howard, L.M., ed, [1986, 277p., eng] 41-271
- Marine radar for iceberg detection. Harvey, M.J., et al, [1986, 82p., eng] 41-272
- Physical approaches to iceberg severity prediction. Marko, J.R., et al, [1986, 104p., eng] 41-274
- Iceberg detection by airborne radar. [1986, 235p., eng] 41-275
- Seas of the World Ocean. Sukhovet, V.F., [1986, 288p., rus] 41-556
- Radar data used for ice detection. Harvey, M.J., et al, [1984, 17p., eng] 41-605
- Melting history of Antarctica during the past 60,000 years. Labeyrie, L.D., et al, [1986, p.701-706, eng] 41-616
- Review of interaction of icebergs with offshore structures. Arunachalam, V.M., et al, [1985, p.693-704, eng] 41-668
- Predicting offshore structures behavior in arctic regions. Zaleski-Zamenhof, L.C., et al, [1985, p.705-716, eng] 41-669
- Response of offshore structures to bergy-bit and iceberg impacts. Arockiasamy, M., et al, [1985, p.951-961, eng] 41-671
- On the deterioration of a grounded iceberg. Venkatesh, S., [1986, p.161-167, eng] 41-675
- Antarctic iceberg distribution and dissolution. Hamley, T.C., et al, [1986, p.242-251, eng] 41-685
- Some factors influencing iceberg scour estimates. Prasad, K.S.R., et al, [1986, p.234-239, eng] 41-849
- Canadian sea ice information system CSIS: an online computer database for sea ice and iceberg data. Whittick, J.A., et al, [1986, p.119-124, eng] 41-969
- Detection of small icebergs in the Arctic Ocean. Larsson, B., et al, [1986, p.358-363, eng] 41-1106
- Wind/wave tank tests of drifting iceberg models. McTaggart, K.A., et al, [1986, p.364-379, eng] 41-1107
- Added mass and damping coefficient for certain 'realistic' iceberg models. Bass, D.W., et al, [1986, p.163-174, eng] 41-1287
- Geography of marine navigation. Nadtochil, G.L., [1985, 263p., rus] 41-1353
- Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al, [1986, p.3920-3924, eng] 41-1361
- Remote sensing of icebergs by ground-wave Doppler radar. Walsh, J., et al, [1986, p.276-284, eng] 41-1510
- Prospects for utilizing snow-ice resources. Kotliakov, V.M., et al, [1986, p.140-144, rus] 41-1656
- Long-range forecasting of Grand Banks iceberg severity. Davidson, L.W., et al, [1986, 163p., eng] 41-1835
- Iceberg trajectory forecasting model for the Grand Banks, Newfoundland. De Margerie, S., et al, [1986, 86p., eng] 41-1836
- Biogenic and mineral inclusions in a green iceberg from the Weddell Sea. Dieckmann, G., et al, [1987, p.31-33, eng] 41-1975
- The ice: a journey to Antarctica. Pyne, S.J., [1986, 428p., eng] 41-2079
- Drilling offshore western Greenland—ice. Hammett, D.S., et al, [1978, p.119-128, eng] 41-2122
- Caisson retained island drilling platform, Beaufort Sea. De Jong, J.J.A., et al, [1978, p.2111-2120, eng] 41-2126
- Model study of iceberg scouring in North Atlantic. Chari, T.R., et al, [1978, p.2319-2326, eng] 41-2128
- Technical schemes for melting natural ice for water-supply systems. Vdovin, I.U.I., [1986, p.189-193, rus] 41-2176
- Glacial giants. History of origin, existence and deterioration of great glaciers. Balandin, R.K., [1986, 175p., rus] 41-2252
- Design of gravity structures under iceberg loading. Cheang, L.C., et al, [1987, p.55-62, eng] 41-2402
- Core temperature measurements on three Arctic icebergs. Goodrich, L.E., [1987, p.103-107, eng] 41-2409
- Minimizing iceberg impact loads on gravity base structures. Wishahy, M.A., [1987, p.291-298, eng] 41-2435
- On the splitting of icebergs—natural and induced. Diemand, D., et al, [1987, p.379-385, eng] 41-2446
- Caisson wellheads allow for future use of offshore exploration wells. McIntosh, I., et al, [1987, p.81-85, eng] 41-2571
- Physical oceanography of Hudson Strait and Ungava Bay. Drinkwater, K.F., [1986, p.237-264, eng] 41-2596
- Iceberg sightings during SIBEX-2, Chile, in Bransfield Strait, 1985. Schlatter, R.P., [1986, p.89-93, spa] 41-2812
- Short term motion analysis of icebergs in linear waves. Arunachalam, V.M., et al, [1987, p.247-258, eng] 41-3036
- Ice scour and seabed engineering. [1986, 322p., eng] 41-3086
- Hydrodynamic forces and iceberg stability. Bass, D.W., et al, [1986, p.60-62, eng] 41-3092
- Grand Bank pits: description and postulated origin. Barrie, J.V., et al, [1986, p.73-77, eng] 41-3094
- Iceberg scouring and its effect on seabed, Norwegian shelf. Lien, R., [1986, p.87-96, eng] 41-3096
- Iceberg-scour modelling at Memorial University of Newfoundland. Chari, T.R., [1986, p.109-117, eng] 41-3098
- Hibernia ice-scour model studies. Schoenthaler, L., [1986, p.118-121, eng] 41-3099
- Iceberg crater chains and scour up- and downslope. Bass, D., et al, [1986, p.122-128, eng] 41-3100
- Dynamics of Iceberg Grounding and Scouring (DIGS) experiment. Lewis, C.F.M., [1986, p.129-131, eng] 41-3101
- Regional geology and seabed dynamics at the proposed iceberg scour (DIGS) experiment site. Josenhans, H.W., [1986, p.132-137, eng] 41-3102
- Iceberg dynamics of the DIGS experiment. Lever, J., [1986, p.138-142, eng] 41-3103
- Geotechnical aspects of the DIGS experiment. Moran, K., [1986, p.143-147, eng] 41-3104
- Iceberg scour distribution, Baffin Island, Canada. King, E.L., et al, [1986, p.172-181, eng] 41-3108
- Iceberg scouring on Saglik Bank, northern Labrador Shelf. Todd, B.J., [1986, p.182-193, eng] 41-3109
- Documentation of iceberg groundings. El-Tai'an, M., et al, [1986, p.194-199, eng] 41-3110
- Grand Banks ice-scour catalogue. Schoenthaler, L., [1986, p.200-203, eng] 41-3111
- Numerical model for iceberg grounding events. D'Apollonia, S.J., et al, [1986, p.221-232, eng] 41-3114
- Palynology as a method for dating iceberg scours. Mudie, P.J., [1986, p.233-239, eng] 41-3115
- Risk assessment for iceberg-scour damage: Labra for Sea and Grand Banks. Allan, D., [1986, p.240-241, eng] 41-3116
- Populations of iceberg scour depths. Gaskill, H., [1986, p.249-258, eng] 41-3117
- Iceberg-grounding study, Labrador well-site observations. Woodworth-Lynas, C.M.T., et al, [1986, p.269-283, eng] 41-3119
- Motion and impact of icebergs against offshore structures. [1986, 133p., eng] 41-3166
- Iceberg scouring; hazard for seabed development. Lewis, C.F.M., et al, [1986, p.1020-1021, eng] 41-3173
- Iceberg scour mapping for the Canadian East Coast. Lewis, C.F.M., [1987, 45p. + maps, eng] 41-3225
- Close range ice hazard detection: Phase 2. De Heering, P., et al, [1987, 67p. + appenda. (2 vols.), eng] 41-3226
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270
- Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274
- Acoustic radar detection of icebergs in pack ice. Marko, J.R., [1987, 135p., eng] 41-3413
- Ice balance of the world's oceans. Lebedev, A.A., [1986, p.322-330, eng] 41-3624
- Giant tabular iceberg data from satellite. McIntyre, N.F., et al, [1987, p.458-462, eng] 41-3677
- Coastline changes revealed by satellite imagery. Ferrigno, J.G., et al, [1987, p.577-583, eng] 41-3856
- Iceberg study, Saglik, Labrador. Allen, J.H., [1973, 92p., eng] 41-3961
- Iceberg scouring rate studies, Grand Banks of Newfoundland. Lewis, C.F.M., et al, [1987, p.825-833, eng] 41-4013
- Iceberg scoring off SE Baffin Island. Praeg, D., et al, [1987, p.847-857, eng] 41-4014
- Origin of glacial raft: detachment, transport, deposition. Ruszczyńska-Szenajch, H., [1987, p.101-112, eng] 41-4100
- Ice conditions during the *Mikhail Somov* cruise in a Soviet antarctic expedition. Proshutinskii, A.I.U., et al, [1986, p.75-78, rus] 41-4190
- Estimate of number of icebergs in the southern ocean. Bagriantsev, N.V., et al, [1986, p.85-87, rus] 41-4191
- Recent advance of the Ross Ice Shelf, Antarctica. Jacobs, S.S., et al, [1986, p.464-474, eng] 41-4302
- Evolution of under-water sides of ice shelves and icebergs. Orheim, O., [1987, p.176-182, eng] 41-4454
- Glacial and iceberg effects on morphology off Wilkes Land. Barnes, P.W., [1987, p.175-194, eng] 41-4545
- Report of the International Ice Patrol in the North Atlantic. [1985, 90p., eng] 41-4576
- Ice hazard detection with ground wave radar. Dawe, B.J., et al, [1986, 84p., eng] 41-4580

## Icebound lakes

- Injection ice formation during subaqueous freezing of sediments. Gravis, G.F., [1986, p.108-112, rus] 41-116
- Ice balance of Lake Baykal during ice breakup. Moskalets, V.F., [1982, p.180-187, rus] 41-1277
- Water resources of the BAM zone. Sokolov, A.A., [1986, 166p. (pertinent p.146-151), rus] 41-2228
- Ice and sediment factors in selection of Inuit water supplies. Hermanson, M.H., [1986, 222p., eng] 41-2615
- Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes. Mitnik, L.M., et al., [1986, p.93-97, rus] 41-2720
- Effects of heat withdrawal on ice covered lakes. Bengtsson, L., [1982, p.3-16, swe] 41-2854
- Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al., [1986, p.21-23, eng] 41-2941
- Nitrification: a significant cause of oxygen depletion under winter ice. Knowles, R., et al., [1987, p.743-749, eng] 41-4229
- Lake ice, radiation, and oxygen deficit at temperate lakes. Prowse, T.D., et al., [1986, p.386-403, eng] 41-4536

See also: Frozen lakes

## Icebound rivers

- Hydrology of the Baykal Amur Railroad area. Dobroumov, B.M., ed., [1986, 135p., rus] 41-420
- River ice cover and winter drainage in the BAM zone. Sokolov, B.L., et al., [1986, p.11-33, rus] 41-422
- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Brattsev, A.P., ed., [1986, 119p., rus] 41-1167
- Water supply and waste water dilution in permafrost regions. Kokovkin, A.V., [1986, p.57-67, rus] 41-1169
- Pollution protection of water resources in the Timan-Pechora Task Economic Complex. Brattsev, A.A., [1986, p.68-73, rus] 41-1170
- Mechanism of ice breakup on rivers and canals. Kozitskii, I.E., [1982, p.70-82, eng] 41-1442
- Forecasting ice breakup dates for Siberian rivers. Liser, I.A., [1986, p.42-60, rus] 41-1965
- Calibrating HEC-2 in a shallow, ice-covered river. Calkins, D.J., et al., [1986, 25 refs., eng] 41-2531
- Morphology, hydraulics and sediment transport of an ice-covered river. Lawson, D.E., et al., [1986, 37p., eng] 41-2612
- Ice blasting. Tavrizov, V.M., [1986, 136p., rus] 41-2646
- Operation of technical equipment in freezing weather. Voloshnikov, D., et al., [1987, p.78-80, rus] 41-3933
- Studies of natural conditions and prospects for their application. Matveev, N.P., ed., [1985, 118p., rus] 41-4560

## Icebreakers

- New offshore ship types for the frontier areas. [1986, p.22-24, eng] 41-88
- Wärtsilä Arctic Pusher System. Segercrantz, H., [1986, p.26-28, eng] 41-89
- Steels for heavy-duty marine and offshore use. [1986, p.34-36, eng] 41-90
- Finnlines fleet for year-round transportation. [1986, p.45-47, eng] 41-91
- R/V *Polar Duke*—a new vessel for antarctic research support. Inderbitzen, A.L., et al., [1985, p.437-440, eng] 41-224
- Ice navigation studies in the Alaskan Arctic using POLAR class icebreakers. Brigham, L.W., et al., [1985, p.441-447, eng] 41-225
- Arctic runs of the Balt. Kotliarskii, M., [1986, p.12-13, rus] 41-435
- Icebreakers: fuel economy and safe navigation. Bereznii, V., [1986, p.35-36, rus] 41-436
- Forecasts and the efficiency of fleet performance. Collection of scientific papers. Shchelkanov, A.G., ed., [1985, 105p., rus] 41-487
- Computerized simulation of fleet performance in the Arctic. Batskikh, I.U.M., et al., [1985, p.48-53, rus] 41-489
- SA-15 ships for ice navigation in northern rivers. Varaksin, K.N., et al., [1985, p.54-56, rus] 41-490
- Using barge-carrier systems in Arctic transportation. Pavskii, E.I., [1985, p.62-67, rus] 41-492
- Architectural and structural type of the 1986-1995 models of refueling-tankers. Moreinis, F.A., et al., [1984, p.19-29, rus] 41-541
- Naval power plants and equipment. Panin, I.U.I., ed., [1984, 153p., rus] 41-554
- Interactions of nuclear ship's propelling system with large ice floes. Basalygin, G.M., [1984, p.52-60, rus] 41-555
- Systems and means of oceanic radio-communication. Panin, I.U.I., ed., [1984, 144p., rus] 41-557
- Guidance systems for ships operating in ice. Likhachev, A.V., [1984, p.36-42, rus] 41-558
- Engines and installations for arctic supply vessels. [1983, p.62-63, eng] 41-789
- Analysis of extreme ice loads measured on USCGC *Polar Sea*. Dsley, C.G., et al., [1984, p.241-252, eng] 41-874

- Ice impact forces on icebreakers. Ghoneim, G.A.M., et al., [1984, p.253-282, eng] 41-875
- Global response of icebreakers ramming heavy ice. Vaughan, H., [1986, p.279-286, eng] 41-876
- Recent encounters with topside icing. Zahn, P.B., et al., [1986, p.123-147, eng] 41-928
- Coast Guard helicopter operations in polar regions. Wendt, P.A., [1986, p.165-173, eng] 41-930
- Coast Guard's new polar icebreaker. Williams, B., [1986, p.473-482, eng] 41-951
- Some latest developments in icebreaker technology. Schwarz, J., [1986, p.161-167, eng] 41-977
- Model test of an ice class bulk carrier with the Thyssen/Waas bow form. Freitas, A., et al., [1986, p.168-172, eng] 41-978
- Corrosion resistance steels for low-temperature construction. Itoh, K., et al., [1986, p.869-896, eng] 41-1136
- Arctic class hopper dredges. Brakel, J., et al., [1986, p.988-1000, eng] 41-1142
- Operational experience with the new-type Baltic icebreaker "Otso". Jansson, J.-E., et al., [1986, p.1039-1060, eng] 41-1145
- Model tests on ice-rubble size and ship resistance in ice rubble. Ettema, R., et al., [1986, p.229-243, eng] 41-1291
- There are different types of ice. Berdnikov, D., [1986, p.46-47, rus] 41-1399
- Processing gravity data using *Shirase* navigational information. Segawa, J., et al., [1986, p.13-18, eng] 41-1470
- Year-round shipping routes in the Canadian Arctic. Dey, B., [1985, p.237-242, eng] 41-1499
- "RAEX POLAR" brand of steel for icebreaker construction. [1985, p.9, rus] 41-1513
- Ship building technology based on research data. Sukselainen, J., [1985, p.36-39, rus] 41-1517
- Beginning the construction of the atomic icebreaker *Taymyr*. Juurmaa, K., [1985, p.44-45, rus] 41-1518
- Diesel engines designed for navigation in heavy ice. [1985, p.70-73, rus] 41-1519
- Valmet Co. program for ice testing of propeller nozzles. [1985, p.108-109, rus] 41-1523
- Providing controllability for an icebreaker running astern in heavy ice. Pershitz, R.I.A., [1986, p.8-10, rus] 41-1576
- Ice technology: proceedings of the 1st International conference. [1986, 594p., eng] 41-1578
- Ice-breaking ships and operational loads. Vaughan, H., [1986, p.313-322, eng] 41-1601
- R-class icebreaker model experiment results. Newbury, G.S., et al., [1986, p.333-348, eng] 41-1603
- U.S. Coast Guard replacement polar icebreaker. Williams, R.E., [1986, p.365-388, eng] 41-1605
- Development of an ice piloting handbook. Brigham, L.W., [1986, p.447-456, eng] 41-1611
- SS ACV icebreaking LNG/oil tanker for year round Arctic transportation. Murthy, T.K.S., [1986, p.563-576, eng] 41-1619
- New direction in the Arctic ice navigation research. Buznev, A.I.A., et al., [1986, p.176-178, rus] 41-1665
- Rules for the classification and construction of sea-going ships. [1986, 680p., eng] 41-1682
- International Polar Transportation Conference, 1986. [1986, 2 vols. (877p.), eng] 41-2020
- Polar class icebreakers. Rinehart, V., et al., [1986, p.19-40, eng] 41-2022
- Current problems in arctic vessel research. Sukselainen, J., et al., [1986, p.41-65, eng] 41-2023
- Local and global strength aspects for icebreaking ships. Ghoneim, G.A.M., [1986, p.105-148, eng] 41-2025
- Future icebreaker design. Johansson, B.M., et al., [1986, p.169-200, eng] 41-2027
- Advances in icebreaker technology in West Germany. Schwarz, J., [1986, p.201-219, eng] 41-2028
- Prospects of Arctic marine technology for the 1990's. Stubbs, J.T., et al., [1986, p.220-243, eng] 41-2029
- Design for a novel icebreaker assisting Arctic LNG vessels. Lindqvist, G., et al., [1986, p.257-278, eng] 41-2031
- Icebird*—a new generation of polar resupply vessel. Brune, E., [1986, p.512-522, eng] 41-2042
- Icebreaking operations in McMurdo Sound, Antarctica. Wubbold, J.H., [1986, p.523-530, eng] 41-2043
- Operating experiences with the *Polarstern* in Antarctica. Suhrmeyer, L., et al., [1986, p.548-562, eng] 41-2045
- Operating of the Antarctic icebreaker *Shirase* and traverse by snow vehicle. Ishizawa, K., [1986, p.563-578, eng] 41-2046
- Winter navigation of icebreaking *Lunni*-class tankers in the Baltic Sea. Tornblom, A., [1986, p.710-725, eng] 41-2053
- M.V. *Arctic* in the Canadian High Arctic. Luce, M., et al., [1986, p.747-763, eng] 41-2056
- Ice management procedures for specialized drilling structures. Kimmerly, P.C., et al., [1986, p.764-791, eng] 41-2057
- Operations with icebreaking cargo vessels on the Northern Sea Route. Mikhailichenko, V., [1986, p.792-804, eng] 41-2058
- Winter marine transportation off Alaska. Brigham, L.W., [1986, p.805-819, eng] 41-2059

- Big HSVA-ice-tank two years in service now. Schwarz, J., et al., [1986, p.1487-1491, ger] 41-2194
- Scandinavian report. [1983, p.S1-S16, eng] 41-2226
- Arctic R & D—a niche for Finland. Jauho, P., [1986, p.21-24, eng] 41-2263
- Offshore technology in Finland—present state and future perspectives. Potila, A., [1986, p.25-35, eng] 41-2264
- Experimental study of maneuverability of icebreakers and ships in sea ice. Ionov, B.P., et al., [1986, p.276-297, eng] 41-2279
- Possibilities for Arctic heavy transportation. Wärtsilä, K.L., [1986, 20p., eng] 41-2284
- Ice loads on icebreaker *Sisu* in 1979-85. Kujala, P., et al., [1986, 52p. + appenda., eng] 41-2336
- Vessel transit through ridged ice. Lee, J., et al., [1987, p.307-312, eng] 41-2437
- Icebreaking tanker moored to an offshore structure. Machemehl, J.L., [1987, p.329-339, eng] 41-2440
- Ice destruction. Methods and technology. Bogorodskii, V.V., et al., [1986, 214p., eng] 41-2564
- Ice problems and research: ships and offshore structures in the Arctic. Joensuu, A., [1986, p.392-399, eng] 41-2883
- Advance in ice mechanics in Finland. Maattanen, M., [1987, p.7-14, eng] 41-2931
- Shipping in the Arctic, autumn 1983. [1984, p.32-35, eng] 41-2937
- Quarter of a century on ice watch. Leviakov, M., [1985, p.20-21, eng] 41-2938
- Nuclear icebreaker *Rosita*. [1985, p.25-27, eng] 41-2939
- New icebreaking bow makes debut. [1986, p.17-18, eng] 41-2977
- Canadian participation in the Polar Class trafficability program. Glen, I.F., et al., [1986, 63p., eng] 41-3028
- Winter navigation—a Finnish specialty. Varsta, P., [1985, p.10-13, rus] 41-3084
- Seymour* is launched. [1986, p.24-25, rus] 41-3203
- Experimental ice navigation of diesel ship. Burkov, G., et al., [1986, p.42-45, rus] 41-3204
- Bibliography of icebreakers and ice breaking. [1984, 129p., eng] 41-3230
- Ocean-atmosphere interactions and climatic changes in Northern Hemisphere. Nikolaev, I.U.V., ed., [1986, 163p., eng] 41-3262
- Studying sea-atmosphere interactions during the cold season. Bogorodskii, P.V., et al., [1986, p.151-157, eng] 41-3267
- Ship operations, 1984-1985. Marthaler, J.G., [1985, p.267-269, eng] 41-3328
- Towing gear of arctic icebreakers. Starshinov, V.A., et al., [1985, p.14-16, rus] 41-3351
- Manoeuvring tests in ice aboard USCGC *Polar Star* in Antarctica, 1985. Menon, B., et al., [1986, 44p. + appenda., eng] 41-3373
- Navigation and ship control. Collection of works. Panin, I.U.I., ed., [1986, 137p., rus] 41-3383
- Icebreaker pilotage of "Dmitrii Donskoi" type ships along the Yenisey River in the winter-spring season. Plotnikov, K.S., [1986, p.98-103, rus] 41-3384
- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed., [1986, 120p., rus] 41-3385
- To change the tactics of ship pilotage in ice. Leskov, M., [1987, p.30-31, rus] 41-3613
- Design margins for icebreakers. Nikolaev, V., [1987, p.42-45, rus] 41-3793
- Soviet operations on the northern sea routes, 1986. Armstrong, T., [1987, p.585-590, eng] 41-3857
- Earl Gray*: a name to live up to. Barr, W., [1987, p.593-596, eng] 41-3858
- Breaking the ice problem. [1986, p.48-51, 55, eng] 41-4138
- Man, sea, technology. Narusbaev, A.A., ed., [1987, 335p., rus] 41-4145
- Ships used in the exploitation of offshore deposits. Gornshel'nik, K., et al., [1987, p.221-231, rus] 41-4147
- Ship for scientific expeditions to Antarctica. Seppanen, E., [1987, p.244-246, rus] 41-4148
- Ice-breaking ferry boats of Lake Baykal. Andrienko, V.G., [1987, p.284-301, rus] 41-4149
- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed., [1984, 24p., rus] 41-4503
- Methods of studying contact interactions of materials with ice and snow. Igoshin, V.A., et al., [1984, p.3-7, rus] 41-4504
- Problem of diminishing the force of icebreaker friction against ice. Maksutov, D.D., [1984, p.15-16, rus] 41-4508
- Adhesion of ice-snow masses to moving ships. Voevodin, V.A., [1984, p.17-19, rus] 41-4509
- Arctic ship technology: the state of the art—1986. Dick, R.A., et al., [1987, 91p., eng] 41-4582

See also: Ice breaking

## Icefalls

- Wave ogives. Waddington, E.D., [1986, p.325-334, eng] 41-4284

## Iceand

- Sea ice off the Icelandic coasts, Oct. 1983-Sep. 1985. [1986, 43p., ice] 41-246

- Marginal and supraglacial lakes in Iceland. Björnsson, H., 1976, p.40-51, eng 41-588
- Grimsvötn geothermal area, Vatnajökull, Iceland. Björnsson, H., et al, 1984, p.25-50, eng 41-590
- History of mapping in Iceland, with special reference to glaciers. Tómasson, H., 1986, p.4-7, eng 41-728
- Surface and bedrock topography of icecaps in Iceland. Björnsson, H., 1986, p.11-18, eng 41-730
- Response time of glaciers in Iceland to changes in climate. Johannesson, T., 1986, p.100-101, eng 41-748
- Glacier oscillation and glacier inventories of Iceland. Williams, R.S., Jr., 1986, p.184-191, eng 41-767
- Snow avalanches in Iceland in the 1982-1983 winter. Jónsson, H.H., 1984, p.159-164, ice 41-808
- Report of jökulhlaups in 1981, 1982 and 1983. Rist, S., 1984, p.165-172, ice 41-809
- Glacier variations during 1964-1983. Rist, S., 1984, p.173-179, ice 41-810
- Impact of climate on grass growth, Iceland. Ogilvie, A.E.J., 1984, p.343-352, eng 41-2008
- Sea ice off the Icelandic coasts, Oct. 1985-Sep. 1986. 1986, 32p., ice 41-2490
- Landforms and sediments produced by glaciers in Iceland. Sharp, M.J., 1982, 380p. + append., eng 41-3141
- Genesis of the push moraine at Kötujökull, Iceland: a commentary. Humlum, O., et al, 1985, p.127-132, eng 41-4131
- Satellite remote sensing of Vatnajökull, Iceland. Williams, R.S., Jr., 1987, p.127-135, eng 41-4447
- Tungnafjökull**
- Tungnafjökull profile surveys 1959-1979. Freysteinnsson, S., 1984, p.131-139, ice 41-806
- Vatnajökull**
- Delineation of glacier drainage basins on Hofsjökull and Western Vatnajökull. Björnsson, H., 1986, p.19-21, eng 41-731
- Glacier outlet of the Vatnajökull in the upper course of the Djupa, southern Iceland. Jaksch, K., 1984, p.97-103, ger 41-805
- Seismic activities in Vatnajökull, Iceland. Brandsdóttir, B., 1984, p.141-150, eng 41-807
- Icequakes**
- Glacier-generated earthquakes from Prince William Sound, Alaska. Wolf, L.W., et al, 1986, p.367-379, eng 41-262
- Stresses in the upper layer of the Hans Glacier, Spitsbergen. Cichowicz, A., 1986, p.13-19, eng 41-1253
- Icing**
- Polar technology—ice engineering. 1986, c10p., eng 41-268
- Northern latitude logistic support. Kover, D., 1986, p.433-438, eng 41-945
- Swedish offshore industry and some Arctic developments. Wassberg, R., 1986, p.41-56, eng 41-1089
- Ice management for year-round operating marine terminals. Tanker, G.P., 1986, p.409-435, eng 41-1110
- Sea spray icing on marine units. Jørgensen, T.S., 1986, p.447-470, eng 41-1112
- Offshore anti-icing, field results and approval considerations. Lonsdale, J.T., et al, 1986, p.471-483, eng 41-1113
- Computer modelling of ice accretion and control of icing on marine units. Löset, S., et al, 1986, p.497-511, eng 41-1115
- Low adhesion coatings for sea spray icing on offshore structures. Sackinger, W.M., et al, 1986, p.512-527, eng 41-1116
- Forecast of ice accretion on marine structures. Jessup, R.G., 1985, 90p., eng 41-1194
- Physical methods of studying material used in railroad technology. Vereshchagin, I.K., ed, 1982, 135p., rus 41-1273
- Ice adhesion to structural materials. Kozlovskaya, R.T., et al, 1982, p.96-101, rus 41-1274
- Mechanical properties of atmospheric ice. Druetz, J., et al, 1986, p.67-74, eng 41-1305
- Icing studies on Mt. Washington: an historical perspective. Rancourt, K.L., 1985, p.197-204, eng 41-1495
- Ramp de-icing. 1975, 16p., eng 41-1761
- Outer Continental Shelf Environmental Assessment Program: Final reports of principal investigators, Vol.39. 1986, 360p., eng 41-1785
- How to moor in ice. Braginets, O., 1986, p.60-61, rus 41-1792
- Features of the Sagavanirktok River, Alaska. Hodel, K.L., 1986, 28p., eng 41-1895
- Antenna ice removal and prevention apparatus. Walton, W.B., Jr., 1983, 4 col., eng 41-1979
- Railroad track control. Zarochentsev, G.V., ed, 1986, 145p., rus 41-2143
- Protecting searching devices of supersonic flaw-detection cars from icing. Paulus, S.V., 1986, p.121-125, rus 41-2144
- Surface icing of different materials. Golubev, V.N., 1986, p.121-128, rus 41-2164
- Structural heat-engineering for road pavements. Mikhailov, A.V., et al, 1986, 149p., rus 41-2210
- Swinging door particle separator and deicing system. Norria, R.M., et al, 1981, 4 col. + 3 sheets, eng 41-2370
- All-Union tutorial seminar on mathematical modeling in science and technology. Summaries. 1986, 333p., rus 41-2381
- Possibility of forecasting the intensity of ice accretion. Volevskaya, V.A., et al, 1986, p.58-67, rus 41-2638
- Self-cleaning gas turbines in an Arctic environment. Retka, R.J., et al, 1987, p.79-84, eng 41-2768
- Effect of oscillatory loads on the bearing capacity of floating ice covers. Kerr, A.D., et al, 1987, p.219-224, eng 41-3032
- Atmospheric icing on communication masts in New England. Mulherin, N.D., 1986, 46p., eng 41-3142
- Rime meteorology in the Green Mountains. Ryerson, C.C., 1987, 46p., eng 41-3144
- On the role of water film in the mechanism of flashover of ice insulators. Sugawara, N., et al, 1986, p.281-284, eng 41-3416
- Cold regions roof design. Tobiasson, W., 1987, p.457-458, eng 41-4277
- Icing of cylinders in a wind tunnel. Bain, M., et al, 1984, p.733-736, eng 41-4414
- Study of sea-spray icing of communications antennas—exploratory (NSAP project Q-5-79). 1981, 43p. + append., eng 41-4636
- See also: Aircraft icing; Glaze; Ice loads; Power line icing; Road icing; Ship icing
- Icing detection**
- See: Ice detection
- Icing rate**
- Calculational method for determination of carburetor icing rate. Nazarov, V.I., et al, 1985, p.544-546, eng 41-2944
- See also: Ice accretion
- Impact**
- Impact of snowflakes on car windshields. King, W.D., et al, 1987, p.149-154, eng 41-2762
- Impact strength**
- Avalanches and avalanche snow loads. Moskalov, I.U.D., 1986, 157p., rus 41-651
- Predicting offshore structures behavior in arctic regions. Zaleski-Zamenhof, L.C., et al, 1985, p.705-716, eng 41-669
- Ice impact forces on icebreakers. Ghoneim, G.A.M., et al, 1984, p.253-282, eng 41-875
- Arctic ice impact assessment for naval surface combatants. Devine, E.A., et al, 1986, p.297-347, eng 41-939
- Structural safety of semis in sub-Arctic waters. Anderson, L., et al, 1986, p.540-564, eng 41-1117
- Impact strength of mudflow mass on transverse structures. Kukhalashvili, E.G., et al, 1985, p.356-360, rus 41-1623
- Minimizing iceberg impact loads on gravity base structures. Wishahy, M.A., 1987, p.291-298, eng 41-2435
- Ice impacts on semisubmersibles. Lindberg, K., et al, 1987, p.313-320, eng 41-2438
- Determination of the ice load on elements of marine hydraulic structures. Gol'din, A.L., et al, 1987, p.417-420, eng 41-2601
- Ice scour mosaic comparison study, 1980. Shearer, J., 1980, 17p. + figs., eng 41-3474
- Breaking of ice during impact interactions. Epifanov, V.P., 1985, p.799-801, eng 41-3629
- Experimental study of plastic wave velocity in snow. Sato, A., 1987, p.183-196, jpn 41-4007
- Impact tests**
- Some experimental findings regarding the mechanical properties of sheet ice. Epifanov, V.P., 1985, p.178-187, eng 41-2971
- Impact experiments in low-temperature ice. Lange, M.A., et al, 1987, p.506-518, eng 41-4177
- Impurities**
- Arctic water pollution research: applications of science and technology. 1986, 193p., eng 41-339
- Residues from dispersions of clay and ice on Martian polar deposits. Saunders, R.S., et al, 1986, p.94-104, eng 41-527
- Traces of Icelandic eruptions in the Greenland Ice Sheet. Hammer, C.U., 1984, p.51-65, eng 41-804
- Preliminary measurements of SO<sub>2</sub> adsorbed on ice. Sommerfeld, R.A., et al, 1986, p.349-351, eng 41-865
- Changes in precipitation chemistry at Dye-3, Greenland. Finkel, R.C., et al, 1986, p.9849-9855, eng 41-1021
- Lead concentration changes in antarctic ice during the Wisconsin/Holocene transition. Boutron, C.F., et al, 1986, p.222-225, eng 41-1630
- Variation of sulfate content in Arctic atmospheric precipitation during the last 90 years. Astratov, M.I.U., et al, 1986, p.38-42, eng 41-1690
- Martian polar caps: a review. Masson, P.L., 1985, p.521-534, eng 41-1722
- Capacitance bridge for low-temperature dielectric measurements. Foote, M.C., et al, 1987, p.130-132, eng 41-1866
- Chemistry of a temperate pond's decaying winter cover. Kingsbury, C.M., et al, 1984, p.139-142, eng 41-1954
- Methanesulphonate in antarctic ice. Ivey, J.P., et al, 1986, p.375-379, eng 41-2503
- Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core. De Angelis, M., et al, 1987, p.318-321, eng 41-2505
- Yellow spots on the ice of Lake Mälaren. Hjort, J., et al, 1982, p.226-230, swe 41-2857
- Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap. Thompson, L.G., et al, 1986, p.361-364, eng 41-2860
- Verification tests for a stiff inclusion stress sensor. Cox, G.F.N., et al, 1987, p.81-88, eng 41-3301
- Influence of reflections from atmospheric precipitation on the characteristics of radar images of sea ice. Aleksandrov, V.I.U., 1985, p.70-76, rus 41-3431
- Prospects for using oxygen isotope determinations in paleogeocryological reconstructions. Vasil'chuk, I.U.K., et al, 1985, p.64-65, rus 41-3535
- Microstructural characteristics of hailstone embryos. Tisov, M.I., et al, 1986, p.229-237, rus 41-3672
- Regional landscape-geochemical investigations. Nechaeva, E.G., ed, 1986, 159p., rus 41-4113
- Role of gas-liquid inclusions in cryogenic shattering of quartz. Rogov, V.V., 1987, p.81-85, rus 41-4169
- Grain growth in polar ice: Pts. 1 and 2. Alley, R.B., et al, 1986, p.415-433, eng 41-4297
- Isotopic fractionation at the base of polar and sub-polar glaciers. Boulton, G.S., et al, 1986, p.475-485, eng 41-4303
- Rheological properties of ice loaded with microparticles. Fisher, D.A., et al, 1986, p.501-510, eng 41-4305
- Spatial distribution of chloride and sulfate in the snow cover in Sapporo, Japan. Suzuki, K., 1987, p.1773-1778, eng 41-4539
- Organic compounds in precipitation samples from southern California. Kawamura, K., et al, 1986, p.115-124, eng 41-4540
- Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP. Boutron, C.F., et al, 1987, p.1197-1202, eng 41-4603
- See also: Gas inclusions; Snow impurities
- India**
- Glacier mapping for an inventory of the Indus drainage basin. Kick, W.J., 1986, p.102-105, eng 41-749
- NRSA experience in hydrologic applications of space technology. Ramamoorthi, A.S., 1986, p.283-286, eng 41-3903
- Indicating instruments**
- See also: Monitors
- Indices**
- See: Permafrost indicators
- Indoor climates**
- Reference guide for building diagnostics equipment and techniques. McKenna, C., et al, 1986, 148p., eng 41-3359
- Vents and vapor retarders for roofs. Tobiasson, W., 1986, 11p., eng 41-4575
- Industrial buildings**
- Hydromechanization in construction of electric power plants. Shkundin, B.M., 1986, 224p. (pertinent p.156-174), rus 41-619
- Heliogeophysics and the control of natural environments. Danilova, A.D., ed, 1986, 192p., rus 41-652
- Separating the background component of snow pollution near industrial sources. Kerbi, S.B., et al, 1986, p.119-123, rus 41-653
- Concrete admixtures for permafrost areas. Friahter, V.I.U., 1986, p.45-46, rus 41-881
- Mobile-crew and modular construction methods in permafrost areas. Petrov, I.M., et al, 1986, p.49-51, rus 41-882
- Lift-slab method of erecting a 30-story building in Krasnoyarsk. Mints, V.M., et al, 1986, p.14-16, rus 41-888
- Experience gained in building electric substations in the Far North. Sosniak, N.V., 1986, p.2-3, rus 41-908
- Substations 110 kv with the equipment housed in superblock structures. Ezrakhovich, L.O., 1986, p.3-6, rus 41-909
- Distributing device 110 kv with mobile reel-carriage switches. Karpov, V.V., et al, 1986, p.9-10, rus 41-912
- Electrical groundings in permafrost areas. Fel'dman, M.L., 1986, p.11-12, rus 41-913
- Influence of geocryological conditions of the construction site on the design of the Vilyuy Hydroelectric Power Plant No.3. Ziskovich, V.Kh., et al, 1986, p.53-55, rus 41-987
- Transportation systems for new developments of the Far North. Vasiluk, V.A., 1986, p.74-79, rus 41-1204
- Basic problems of power supply in the North. Ryl'akli, V.A., et al, 1986, p.86-93, rus 41-1205
- Ground water level rise in Siberia and the Far North and East. Gospodinov, D.G., 1985, p.27-33, rus 41-1363
- Power plant construction on permafrost. Shielman, A.Sh., 1986, p.8-12, rus 41-1400
- Microclimate and temperature-humidity regime of building enclosures in the North. Vas'kovskii, A.P., 1986, 165p., rus 41-1681
- Modular construction of oil and gas industry objects. Manual. Batalin, I.U.P., ed, 1986, 576p., rus 41-1746
- Thermal performance of the building envelope. Tabunashchikov, I.U.A., et al, 1986, 400p., rus 41-1749

**Industrial buildings (cont.)**

- Trends in the development of new mining regions. Agranat, G.A., [1986, p.14-25, rus] 41-1821
- Light one-layer concrete enclosures designed for the North. Makarova, N.A., et al, [1986, p.36-37, rus] 41-1889
- Construction of electric power substations in permafrost regions. Khomutov, V.A., et al, [1986, p.22-23, rus] 41-1920
- Durability of metal structures of industrial buildings in Yakutia. Filippov, V.V., et al, [1985, p.37-47, rus] 41-2849
- Basic structures of the Kureyskaya hydroelectric plant. Makarov, V.A., et al, [1986, p.11-17, rus] 41-2863
- Concrete work at the Kureyskaya power plant site. Bukhman, V.I., [1986, p.50-54, rus] 41-2869
- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed, [1986, 81p., rus] 41-2916
- Double air and hot-air curtains in entrances to industrial buildings. Ilev, M.V., [1986, p.26-32, rus] 41-2917
- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] 41-2919
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Recommendations for the factory finishings of new standard house facades for northern towns. Kholopova, L.I., et al, [1986, 39p., rus] 41-3021
- Geomechanical studies of power supply structure foundations. Sapagin, D.D., ed, [1985, 120p., rus] 41-3126
- Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant. Golli, O.R., [1985, p.52-56, rus] 41-3127
- Manual for construction foremen working in the northern construction-climatic zone. Serezhovskii, B.I., et al, [1986, 328p., rus] 41-3664
- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., [1987, 208p., rus] 41-3804
- Engineering preparations for construction of the Surgut Power Plant. Lutsiuk, I.V., et al, [1987, p.14-17, rus] 41-3808
- Man, sea, technology. Narusbaev, A.A., ed, [1987, 335p., rus] 41-4145
- Effect of dynamic action on compressibility of thawing sands. Izometshev, V.K., [1987, p.235-240, eng] 41-4165
- Efficiency of producing and using lightweight concretes for construction in the Murmansk region. Nesterov, V.V., et al, [1986, p.62-67, rus] 41-4557
- Experimental thawing of the permafrost base beneath the reconstructed main body of the Chita-I heat and electric power plant. Abashev, N.V., et al, [1986, p.9-10, rus] 41-4617

**Industrial development**

See: Economic development

**Infiltration**

See: Permeability; Seepage

**Infrared equipment**

Infrared measurement of free-water content and grain size of snow. Hyvärinen, T., et al, [1987, p.342-348, eng] 41-3780

**Infrared photography**

Forest fire spread rates estimated from infrared images. Valendik, E.N., et al, [1985, p.777-788, eng] 41-1444

Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1985, 259p., rus] 41-3534

Fractures in arctic winter pack ice (North Water, northern Baffin Bay). Steffen, K., [1987, p.211-214, eng] 41-4460

**Infrared radiation**Scattering at mm wavelengths from *in situ* snow. Walsh, J., et al, [1986, p.1.6-1.6.2, eng] 41-95

Millimeter wave propagation in snow, rain and fog. Patterson, E.M., et al, [1986, p.6.5.1-6.5.4, eng] 41-99

Effectiveness of thermal viewing equipment for ice surveying. Oviannikov, V.A., [1985, p.82-83, rus] 41-1406

Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al, [1986, p.21-23, eng] 41-2941

Extinction coefficient measurement in falling snow. Koh, G., [1987, 9p., eng] 41-3849

**Infrared reconnaissance**

Effectiveness of thermal viewing equipment for ice surveying. Oviannikov, V.A., [1985, p.82-83, rus] 41-1406

Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al, [1986, p.21-23, eng] 41-2941

Problems in automation of geophysical investigations. Collection of works. Deviatitskiy, A.S., ed, [1985, 162p., rus] 41-3543

Classification of sea ice according to structural characteristics. Aleksanina, M.G., [1985, p.52-58, rus] 41-3544

Using GOES thermal infrared data to map citrus freeze zones. Shih, S.F., et al, [1987, p.737-743, eng] 41-3777

**Infrared spectroscopy**

Infrared spectral radiance measurements of snow and clouds from space. Veismann, U.K., et al, [1921, p.219-225, eng] 41-1446

Ices in planetary rings. Smoluchowski, R., [1985, p.681-689, eng] 41-1730

Water in regolith from Mare Crisium (Luna 24)? Akhmanova, M.V., et al, [1978, p.285-288, rus] 41-3208

OH and OD stretching fundamentals of isotopically dilute HDO in ice Ih. Falk, M., [1987, p.28-30, eng] 41-4054

**Insolation**

See: Solar radiation

**Instruments**

See also: Indicating instruments; Measuring instruments; Recording instruments

**Insulation**

See: Electrical insulation; Thermal insulation

**Intake systems**

See: Water intakes

**Interfaces**

Melting process in which solid-liquid interface remains free during melting. Shmarev, S.I., [1986, p.95-99, rus] 41-1627

Freezing and interfaces: density functional theories in two and three dimensions. Haymet, A.D.J., [1986, p.1-32, eng] 41-2810

**Internal waves**

Internal waves in the Arctic Ocean: a review. Morison, J., [1986, p.1163-1183, eng] 41-3005

**International cooperation**

Seventh continent: Antarctica in a resource age. Shapley, D., [1985, 315p., eng] 41-649

Antarctic ice sheet studies: results and plans. Aver'yanov, V.G., et al, [1984, p.79-85, rus] 41-2356

United States: an arctic nation. [1987, 46p., eng] 41-2566

Australia, Britain, and Antarctica. Millar, T.B., ed, [1986, 111p., eng] 41-2597

International antarctic glaciological program activities at South Pole Station and Vostok. Lorus, C., [1985, p.73-74, eng] 41-2633

U.S.-Canadian cooperation in the Arctic. Friedheim, R.L., [1986, p.360-367, eng] 41-2692

Ocean development and management in the Arctic by USA and Canada. Vanderzwaag, D.L., et al, [1986, p.327-337, eng] 41-2724

Jurisdiction and management of Arctic marine transportation. Westermeyer, W.E., et al, [1986, p.338-349, eng] 41-2725

Report of the U.S. Arctic Research Commission, 1985. [1986, 33p., eng] 41-3425

Antarctic science. Walton, D.W.H., ed, [1987, 280p., eng] 41-3531

**Interstitial ice**

Binding modes of water in plant leaves: a dielectric study. Pissis, P., et al, [1987, p.119-125, eng] 41-2223

**Introduced plants**

Transplantation methods for lichen indication. Trass, Kh.Kh., [1985, p.140-144, rus] 41-1041

Introduced cold-resistant woody plants in Siberia. Vostovskaya, T.N., [1986, p.22-24, rus] 41-1833

Introduction of aconites into the Subarctic. Gorelova, A.P., [1986, 116p., rus] 41-1927

Adaptation of boreal plants to Arctic conditions. Borisovskaya, G.M., et al, [1986, p.15-22, rus] 41-2599

**Ion density (concentration)**

Antarctic precipitation chemistry. Delmas, R.J., [1986, p.249-266, eng] 41-1843

Limnology of Garrow Lake, NWT, Canada. Dickman, M., et al, [1987, p.531-549, eng] 41-3854

Spatial variability of snowcover chemistry in a Scottish catchment. Tranter, M., et al, [1987, p.853-862, eng] 41-3889

**Ions**

Chloride ion penetration in conventional concrete and concrete containing condensed silica fume. Marusin, S.L., [1986, p.1119-1133, eng] 41-1157

Variations in ionic composition between High Arctic lake and land snowpack. Allan, C., et al, [1985, p.277-283, eng] 41-1505

Solar energetic ions and interplanetary grains. Strazzulla, G., et al, [1985, p.273-285, eng] 41-1707

Ion bombardment of the surface of ice objects. Johnson, R.E., et al, [1985, p.301-315, eng] 41-1709

Ion irradiations of water, sulfur dioxide and methane ices. Lanzerotti, L.J., et al, [1985, p.317-335, eng] 41-1710

Capacitance bridge for low-temperature dielectric measurements. Foote, M.C., et al, [1987, p.130-132, eng] 41-1866

Effect of ions on cloud condensation and ice nucleation. Singh, N., et al, [1985, p.343-350, eng] 41-2242

Major inorganic ions in the North Pole snow samples. Karlsson, V., et al, [1987, p.8-13, eng] 41-3369

Erosion of ices by ion irradiation. Benit, J., et al, [1987, p.838-842, eng] 41-4330

**Irrigation**

Designing canal linings for frost heaving ground. Alimov, A.G., [1986, p.19-24, rus] 41-2554

**Islands**

See: Artificial islands; Ice islands

**Isostasy**

Model of stresses in the Antarctic lithosphere induced by ice loads. Shemenda, A.I., et al, [1986, p.97-102, rus] 41-1166

On deglaciation-induced perturbations of the geoid. Wolf, D., [1986, p.269-272, eng] 41-2686

**Isotope analysis**

Isotope research in Antarctica. Schütze, H., [1985, p.2-5, ger] 41-76

Possibilities of oxygen-isotope technique in studying ground ice. Arkhangelov, A.A., et al, [1986, p.88-92, rus] 41-111

Using stable isotopes in studying ground ice. Kritsuk, L.N., et al, [1986, p.92-97, rus] 41-112

Late Pleistocene sedimentation processes on the antarctic continental shelf. Grobe, H., [1986, 121p. + figs., ger] 41-267

Permafrost and ice-wedge growth. Worsley, P., [1986, p.683-684, eng] 41-615

Study of tabular ground ice bodies from the Ledyanaya Gora section in the Yenisey valley using the oxygen isotope method. Valkmiae, R.A., et al, [1986, p.32-38, eng] 41-1789

Stratification in the ice core from Vestfonna, Nordaustlandet. Punnug, I.A.-M.K., et al, [1986, p.39-43, eng] 41-1790

Chronostratigraphy of syngenetic permafrost deposits by oxygen-isotope analysis. Arkhangelov, A.A., et al, [1986, p.415-417, rus] 41-2307

Land ice/sea ice transition at J-9 on Ross Ice Shelf. Grooter, F.M., et al, [1985, p.66-68, eng] 41-2628

Oxygen-18 studies of snowmelt runoff in Precambrian shield watershed. Bottomley, D.J., et al, [1986, p.213-234, eng] 41-2697

Characteristics of a glacial valley in the North Italian Dolomites. Van de Griend, A.A., et al, [1986, p.275-299, eng] 41-2698

Long-term climatic changes indicated by crystal growth in polar ice. Petit, J.R., et al, [1987, p.62-64, eng] 41-2750

Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1985, 259p., rus] 41-3534

Prospects for using oxygen isotope determinations in paleogeocryological reconstructions. Vasil'chuk, I.U.K., et al, [1985, p.64-65, rus] 41-3535

Ground ice origin from deuterium and heavy oxygen isotope content. Vasil'chuk, I.U.K., et al, [1985, p.66-68, rus] 41-3536

Isotope composition of ground ice on the Yamal Peninsula. Kritsuk, L.N., et al, [1985, p.142-143, rus] 41-3537

Oxygen isotope composition of syngenetic ice wedges (analytical data, problems of paleoclimatic reconstruction). Vasil'chuk, I.U.K., et al, [1986, p.107-119, rus] 41-3775

Oxygen isotope ratio in meltwater of the ice cap, Jakobshavn. Rech, N., et al, [1986, 34p., dan] 41-3938

Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124

Isotopic fractionation at the base of polar and sub-polar glaciers. Boulton, G.S., et al, [1986, p.475-485, eng] 41-4303

Preliminary data on changes of lead concentrations in antarctic ice from 155,000 to 26,000 years BP. Boutron, C.F., et al, [1987, p.1197-1202, eng] 41-4603

**Isotopes**

Use of deuterium to trace the origin of drifting sea ice. Arnason, B., [1985, p.85-89, eng] 41-591

Stable isotope stratigraphy of ice cores and the age of the last eruption at Mount Melbourne, Antarctica. Lyon, G.L., [1986, p.135-138, eng] 41-610

Polar ice cores. Palais, J.M., [1987, p.55-60, eng] 41-3937

See also: Carbon isotopes; Oxygen isotopes; Radioactive isotopes

**Italy**

Winter maintenance of roads with heavy traffic, Italy. Maggiorotti, P., [1986, p.48-56, ita] 41-2231

Winter maintenance of urban roads with high traffic performance. Baiano, G., [1986, p.57-61, ita] 41-2232

Problems and indications for a new inventory of Italian glaciers based on comparison between the Italian Inventory of 1959-62 and the World Glacier Inventory. Belloni, S., et al, [1985, p.166-181, ita] 41-3185

Electronic monitoring and telematics for traffic protection along state roads. Ortolani, E., [1987, p.16-19, ita] 41-3307

Winter maintenance of highways. Lazzarotti, G., [1987, p.20-22, ita] 41-3308

Snow-gun season. Marocchi, A., [1987, p.39-41, ita] 41-3309



- Alps**  
Mapping buried glacier ice, Monte Rosa, Italian Alps. Haeberli, W., et al, [1986, p.78-81, eng] 41-743  
Snowfall over Italian Alps. Latini, A., [1986, p.53-63, ita] 41-867  
Distribution of snowstorms over the Italian Alps and weather types. Latini, A., [1986, p.8-19, ita] 41-2233  
Present trend of the glaciers of the Italian Alps. Zanoni, G., [1985, p.89-96, ita] 41-3178  
Problems arising from collection and interpretation of data for a new glacier inventory. Secchieri, F., [1985, p.156-165, ita] 41-3184
- Alto Adige**  
Glaciological investigation on the Vedretta Alta and Vedretta Occidentale di Ries (Alto Adige/South Tyrol). Secchieri, F., et al, [1985, p.137-143, ita] 41-3181
- Bolzano**  
Glacier inventory of the province of Bolzano. Valentini, P., [1985, p.182-195, ita] 41-3186
- Rutor Glacier**  
Peat formation of the Rutor Glacier (Aosta Valley). Results obtained by palynostratigraphic study of new peat outcrops near the glacier snout. Armando, E., et al, [1985, p.144-149, ita] 41-3182
- Japan**  
Snow damage to trees in NE Japan. Tsukahara, H., et al, [1984, p.133-138, eng] 41-708  
Tree deformation due to snow pressure. Taira, H., [1984, p.139-147, eng] 41-709  
Current problems on avalanche research in France, Japan and Austria. Kronfellner-Kraus, G., [1984, p.151-154, ger] 41-710  
Investigation on the straight asphalt properties of Japan. Iijima, T., et al, [1987, p.1-36, eng] 41-4020  
Recycling of pavement *in-situ* in Japan. Kohno, H., et al, [1987, p.867-892, eng] 41-4046
- Joetsu-Shinkansen**  
Outline of the studies on the system of snow-melt of the Joetsu-Shinkansen. Nakamata, S., [1985, p.1-6, jpn] 41-4584
- Kuranosuke**  
Protalus rampart related to alpine flows in Japanese Alps. Ono, Y., et al, [1986, p.213-223, eng] 41-1880
- Kuranosuke**  
Radar sounding of fossil ice within the Kuranosuke snow patch, Japan. Yamamoto, K., et al, [1987, p.218-220, eng] 41-4462
- Niigata Prefecture**  
Powder snow avalanche in the Niigata Prefecture, 1986. Izumi, K., et al, [1986, p.168-170, jpn] 41-1221
- Sapporo**  
Report of pit-wall observations of snow cover in Sapporo. Endo, Y., et al, [1986, p.1-10, jpn] 41-225  
Snow-cover electrical resistivity and wind precipitation in Sapporo. Mizuno, Y., [1986, p.11-15, jpn] 41-350  
Radiation measurements of snowy season in 1986 at Sapporo. Ishikawa, N., et al, [1986, p.17-23, jpn] 41-3403  
Comparison between Landsat cloud images and precipitation radar echoes. Endoh, T., et al, [1986, p.121-131, jpn] 41-3885
- Shinjo**  
Radar observations of snowfall in 1986 over the Shinjo basin, Japan. Maki, M., et al, [1987, p.1-17, jpn] 41-4002
- Jet engines**  
Determination of surface temperature of anti-ice axial compressor inlet guide vane. Osipov, V.N., [1985, p.56-60, eng] 41-2943
- Jets**  
See: Hydraulic jets
- Joints (junctions)**  
Frame of the main building of the Neryungri power plant. Pavliukov, S.I., [1986, p.13-17, rus] 41-144  
Thermal performance of the building envelope. Tabunshchikov, I.U.A., et al, [1986, 400p., rus] 41-1104  
Increasing frost resistance of steel bridges. Gol'shakov, K.P., [1986, p.12-14, rus] 41-1194  
Reliability of welded steel joints of main pipelines. Chaburkin, V.F., [1985, p.54-61, rus] 41-2850  
Making concrete dams monolithic by connecting structural joints. Argal, E.S., [1987, 110p., rus] 41-4150
- Karst**  
Karst ground water activity in permafrost of Canada. Ford, D.C., [1984, p.340-350, eng] 41-2118  
Pingo scars in Devès, Haute-Loire, France. Rout, P., [1986, p.17-26, fre] 41-3577  
Micropollutant behavior in karst water systems during snowmelt. Simmlait, N., et al, [1987, p.79-95, eng] 41-3965  
Micropollutant behavior in karst water: karst filtration capacity. Simmlait, N., et al, [1987, p.97-109, eng] 41-3966
- See also: Thermokarst
- Kenya**  
**—Lewis Glacier**  
Explanatory text to the map of Lewis Glacier, Mount Kenya, 1983. Patzelt, G., et al, [1984, p.177-195, ger] 41-634
- Kerguelen Islands**  
Ice cover on Kerguelen during the last glacial. Hall, K., [1984, p.225-232, eng] 41-481  
Recent changes in the glaciers of Heard Island. Allison, I.F., et al, [1986, p.255-271, eng] 41-1020
- Labor costs**  
See: Work time standards
- Labor factors**  
Staffing of maintenance crews during winter months. Rissel, M.C., et al, [1985, p.12-21, eng] 41-656  
Calculation of optimal work time for polar conditions. Mustatova, M.M., [1986, p.50-51, rus] 41-1890
- Laboratories**  
Ice engineering laboratory, Nippon Kohan K.K. [1986, p.113-115, jpn] 41-444  
Arctic vessel research laboratory and program. Jeffrey, N.E., [1986, p.467-468, eng] 41-950  
Corps of engineers seek ice solutions. Frankenstein, G.E., [1987, p.5-7, eng] 41-3140  
Development of an automatic geophysical observatory. Doolittle, J.H., et al, [1985, p.229-231, eng] 41-3326
- Laboratory techniques**  
Alaska testlab: helping contractors avoid costly mistakes. [1984, p.36-40, eng] 41-1330  
Properties of ice accreted in two-stage growth. Prodi, F., et al, [1986, p.1057-1080, eng] 41-1475  
Density of accreted ice. Prodi, F., et al, [1986, p.1081-1090, eng] 41-1476  
Laboratory investigation of the melting of ice by induced convection. Bogorodskii, V.V., et al, [1986, p.94-96, eng] 41-3682  
Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al, [1986, p.29-33, rus] 41-3767  
Determining the thermal conductivity coefficient for thawed and frozen grounds. Danielian, I.U.S., et al, [1983, p.20-24, rus] 41-4483
- Labrador Sea**  
Sea ice conditions in the Labrador Sea-Grand Banks area. Zakrzewski, W.P., [1986, p.60-87, eng] 41-145  
Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., [1986, p.115-161, eng] 41-147  
Long-range prediction of iceberg severity in the Labrador Sea. Wittman, W.L., et al, [1986, p.355-385, eng] 41-155  
Temperature, salinity and density profiles around icebergs in the Labrador Sea. Pearson, D.E., [1986, p.472-491, eng] 41-160  
Design, development and deployment of instrument packages to monitor the motion of glacial ice masses at sea. Lever, J.H., et al, [1986, p.225-236, eng] 41-1594  
Risk assessment for iceberg-scour damage: Labrador Sea and Grand Banks. Allan, D., [1986, p.240-248, eng] 41-3116  
They sink icebergs. LeBlanc, J., [1987, p.2-7, eng] 41-3530  
Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., [1987, p.134-146, eng] 41-4278
- Lacustrine deposits**  
Deflation and nival eolian phenomena near a glacier, SW Spitzbergen. Migala, K., et al, [1984, p.197-206, eng] 41-635  
Use of lacustrine sedimentary sequences as indicators of Holocene glacial history. Banff National Park, Alberta, Canada. Leonard, E.M., [1986, p.218-231, eng] 41-1191  
Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka). Kotov, A.N., et al, [1986, p.114-120, rus] 41-2091  
Evidence for Holocene thaw unconformity at Mayo, Yukon Territory. Burn, C.R., et al, [1986, p.794-803, eng] 41-2684  
Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka). Rubinshteyn, A.I.A., [1986, 89p., rus] 41-2729  
Characteristics of granulometric composition of Late Pleistocene deposits in the Ledovyy Obryv outcrop. Kotov, A.N., et al, [1986, p.200-206, rus] 41-2841  
Deformation by ice of sediment remnant magnetism. Day, B., [1986, p.78-81, eng] 41-3095  
Cyclic swelling of clays. Osipov, V.I., et al, [1987, p.23-36, rus] 41-3399  
Cryolithologic structure of a glacier lake. Östrem, G., et al, [1987, p.133-138, eng] 41-3556  
Lake sediments and deglaciation on Svalbard. Österholm, H., [1984, p.329-344, eng] 41-3564  
Acoustic survey and glacial history of Adams Lake, Labrador. Bell, T., et al, [1987, p.101-110, eng] 41-4011  
Isotopic composition and origin of lacustrine brines in the Arctic. Pačč, P., et al, [1987, p.210-216, eng] 41-4078  
Diamict mass in glacial Lake Maumee III sediments, S.W. Ontario. Stewart, R.A., [1987, p.844-849, eng] 41-4082
- Lake bursts**  
Engineering protection of mountainous regions from dangerous glacial processes. Grakovich, V.F., et al, [1986, p.102-104, 214-216, rus] 41-4350  
Glacial floods and their control. Mochalov, V.P., et al, [1986, p.104-108, 216-219, rus] 41-4351
- Artificial drainage for prevention of glacial lake bursts. Nurkadilov, L.K., et al, [1986, p.108-110, 220-221, rus] 41-4352  
Studies of glacial hydrology and bursting of glacial lakes. Collins, D.N., [1986, p.114-122, 224-232, rus] 41-4354  
Origin and evolution of Goes Lake, Spitsbergen. Grzes, M.G., et al, [1986, p.122-124, 233-234, rus] 41-4355
- Lake effects**  
Mesoscale features of the Michigan land breeze using PAM II temperature data. Schoenberger, L.M., [1986, p.127-135, eng] 41-3136  
Lake-effect snow storms on Lake Michigan, USA. Braham, R.R., Jr., et al, [1982, p.87-101, eng] 41-3375  
Air flow over Lake Michigan and lake-affected snow event. Hjelmfelt, M.R., et al, [1982, p.228-235, eng] 41-3377  
Mesoscale lake-effect snowstorms near Lake Michigan. Hsu, H.-M., [1987, p.1019-1040, eng] 41-3850
- Lake ice**  
River and lake ice engineering. Ashton, G.D., ed, [1986, 485p., eng] 41-231  
Ice problems associated with rivers and reservoirs. Benson, C., et al, [1986, p.70-98, eng] 41-475  
Spectral distribution of light under a subarctic winter lake cover. Roulet, N.T., et al, [1986, p.89-95, eng] 41-484  
Short-pulse radar investigations of freshwater ice sheets and brash ice. Arcone, S.A., et al, [1986, 10p., eng] 41-594  
Remote sensing of nonthermal radio emission of ice covers. Kachurin, L.G., et al, [1984, p.441-448, eng] 41-819  
Placers of cosmic dust in the blue ice lakes of Greenland. Maurette, M., et al, [1986, p.869-872, eng] 41-1070  
Archive of the ice record from Knob Lake, Quebec, 1954 to present. Adams, P., et al, [1985, p.284-289, eng] 41-1506  
Great Lakes climatological atlas. Sauleleja, A., ed, [1986, 145p., eng] 41-1577  
Soviet glaciological studies in 1985. Kotliakov, V.M., et al, [1986, p.3-10, rus] 41-1632  
Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al, [1986, p.199-228, rus] 41-1560  
Underground ice in permafrost. Gell, W.A., [1976, 260p., eng] 41-1764  
Spatial variability of lake ice covers. Bengtsson, L., [1986, p.113-121, eng] 41-1848  
Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka). Kotov, A.N., et al, [1986, p.114-120, rus] 41-2091  
Ice ramparts and the history of studies on them. Sasaki, T., [1986, p.215-221, jpn] 41-2605  
Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes. Mitnik, I.M., et al, [1986, p.93-97, rus] 41-2732  
Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al, [1986, p.21-23, eng] 41-2941  
Determination of crack resistance of freshwater ice. Danilenko, V.I., [1985, p.131-136, eng] 41-2972  
Northern lake and reservoir modeling. Gosink, J.P., [1987, p.281-300, eng] 41-3038  
Ice engineering for rivers and lakes bibliography. Wortley, C.A., [1987, 117p., eng] 41-3223  
Northern limnological processes: research and management. Adams, W.P., [1987, p.112-146, eng] 41-3234  
Effect of climate fluctuations on selected cryospheric parameters. Da Silva, C.P., [1984, 27p., eng] 41-3421  
On the use of lake ice conditions to monitor climatic change. Anderson, J.C., [1987, 28p. + appendix, eng] 41-3434  
Date of break-up of lake ice as a climate index. Ruosteenoja, K., [1986, p.89-99, eng] 41-3758  
Man, sea, technology. Narushev, A.A., ed, [1987, 335p., rus] 41-4145  
Ice-breaking ferry boats of Lake Baykal. Andrienko, V.G., [1987, p.284-301, rus] 41-4149  
Marine meteorological and oceanographic products of the OPC. Peit, D.M., [1986, 105p., eng] 41-4156  
Dispersion in ice-covered lakes. Bengtsson, L., [1986, p.151-170, eng] 41-4516  
Reservoir with a submerged outlet tunnel during winter. Tvede, A.M., [1986, p.399-406, eng] 41-4518  
Ice motion in Lake Erie. Campbell, J.E., et al, [1987, 22p., eng] 41-4577  
Under ice ecology pilot program, Great Lakes. Bolsenga, S.J., et al, [1986, 44p. + appendix, eng] 41-4581
- Lake water**  
72-year Lake Michigan region snow climatology. Dungey, M.J., et al, [1982, p.45-48, eng] 41-2  
Winter and summer low flows in Finland. Kuusisto, E., [1986, p.31-38, eng] 41-535  
Hypersaline gradients in two Canadian High Arctic lakes. Stewart, K.M., et al, [1986, p.1795-1803, eng] 41-1222  
Snow and water chemistry of lakes in northern Saskatchewan. Shewchuk, S.R., [1983, 62p., eng] 41-2578

**Lake water (cont.)**

- Temporal chemical variability in acid sensitive lakes. Welch, E.B., et al., [1982, p.16, swe.] 41-2857
- Effects of heat withdrawal on ice. Bengtsson, L., [1982, p.3-16, swe.] 41-2857
- Yellow spots on the ice of Lake Mälaren. [1982, p.226-230, swe.] 41-2857
- Northern lake and reservoir modeling. [1987, p.281-300, eng.] 41-3038
- Northern limnological processes: research and management. Adams, W.P., [1987, p.112-146, eng.] 41-3236
- Water from glacier-dammed Russell Lake, Alaska. Seitz, H.R., et al., [1986, 10p., eng.] 41-3303
- Water depth of Lagoon San Rafael, Patagonia. Nakajima, C., et al., [1987, p.103-105, eng.] 41-3834

**Lakes**

- Structure and dynamics of forest landscapes in Karelia. Belousova, N.A., ed., [1985, 184p., rus.] 41-189
- Relations between swamp development and relief forms of northern plains. Kolomytsev, V.A., [1985, p.125-149, rus.] 41-194
- Use of water resources and the formation of water-reservoir shores in Siberia. Kuskovskii, V.S., et al., [1986, p.3-7, rus.] 41-811
- Heat release during agitated water movement near the ice surface. Gogolev, E.S., et al., [1985, p.14-16, rus.] 41-1816
- Primary production in the Bratsk reservoir. Part 2. Assimilation of carbon by phytoplankton. Pautova, V.N., et al., [1986, p.50-58, rus.] 41-1834
- Interactions between artificial lakes and permafrost. Afanasenko, V.E., et al., [1986, p.120-127, rus.] 41-2092
- Project of the experimental Yamberg ice-core dam. Danielian, I.U.S., et al., [1986, p.183-189, rus.] 41-2175
- Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al., [1986, 63p., rus.] 41-2362
- Radiocarbon chronology of the last glaciation in McMurdo Sound. Denton, G.H., et al., [1985, p.59-61, eng.] 41-2625
- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed., [1985, 160p., rus.] 41-4118
- Diatomaceous algae in water bodies of the Kolyma Power Plant. Kharitonov, V.G., [1985, p.91-105, rus.] 41-4121
- See also: Frozen lakes; Glacial lakes; Icebound lakes; Limnology; Ponds; Reservoirs; Salt lakes; Thermokarst lakes

**Laminar flow**

- Density effects on laminar convection in water pipes near 4°C. Cheng, K.C., et al., [1978, p.67-72, eng.] 41-464
- Improved thermal insulation in windows by laminar airflows. Tjelflaaf, P.O., et al., [1986, p.992-1003, eng.] 41-1391
- Laminar flow heat transfer in a tube with internal solidification. Toda, S., et al., [1986, p.1745-1750, eng.] 41-3293

**Land ice**

- The living Earth. Agriculture and natural resources. Ushakov, S.A., ed., [1986, 167p., rus.] 41-1163
- Model of stresses in the Antarctic lithosphere induced by ice loads. Shemenda, A.I., et al., [1986, p.97-102, rus.] 41-1166

- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus.] 41-3270

- Model of the ice age cycle. Hyde, W.T., et al., [1987, p.1351-1374, eng.] 41-4053

- Modelling of continental and sea ice as part of climate models. Nagurnyi, A.P., [1986, 104p., rus.] 41-4092

- Basic components of chemical balance of the Arctic Ocean. Rusanov, V.P., [1986, p.40-51, rus.] 41-4195

**Land reclamation**

- Increasing the service life of hydraulic structures. Gavrilenko, V.I., et al., [1985, p.61-63, rus.] 41-306
- Corps of Engineers Land Treatment Research and Development program. Iskandar, I.K., [1986, p.17-18, eng.] 41-406

- Jamming of taiga rivers by fallen trees. Zemtsov, A.A., et al., [1986, p.101-107, rus.] 41-813

- Engineering and geological investigations of saline soils. Bakonov, B.B., et al., [1986, 245p., rus.] 41-996

- Removal of trace-level organics by slow-rate land treatment. Parker, L.V., et al., [1986, p.1417-1426, eng.] 41-1349

- Hydrologic investigations of landscapes. Bachurin, G.V., et al., [1986, 208p., rus.] 41-1365

- Human factor impacts on Siberian floodplains during land reclamation. Malik, L.K., [1986, p.64-71, rus.] 41-1367

- Overland flow wastewater treatment at Easley, S.C. Abernathy, A.R., et al., [1985, p.291-299, eng.] 41-1899

- Radiation regime of southern Tyumen' forests. Abdullayev, A.A., [1986, p.52-56, rus.] 41-2249

- Cryogenic deformations in reclaimed lands of the Khanka plain. Ral'ko, V.D., [1986, p.160-162, rus.] 41-2251

- Modern concept of soil cryogenesis, the evolution of cryogenic soils in Holocene and problems of land reclamation in the presence of permafrost. Maakev, O.V., [1986, p.37-46, rus.] 41-2353

- Calculating frost resistance of concrete used in land reclamation construction. Shlaen, A.G., [1986, p.19-22, rus.] 41-2553

- Designing canal linings for frost heaving ground. Alimov, A.G., [1986, p.19-24, rus.] 41-2554

- Peat mining and preliminary construction work in winter. Khomich, V.A., [1986, p.15-17, rus.] 41-2555

- Energy-saving techniques for winter works. Zheuko, P.I.A., [1986, p.18-20, rus.] 41-2557

- Remote sensing in the study of elements of moisture supply to ecosystems. Grin, A.M., et al., [1986, 113p., rus.] 41-2732

- Blasting work in ground and rocks. Kucheravyl, F.I., ed., [1986, 128p., rus.] 41-2903

- Peat excavation by blasting in channel construction. Frash, G.B., [1986, p.54-61, rus.] 41-2905

- Changes in spring-flood runoff induced by forest swamp drainage. Pakutin, A.V., [1987, p.67-70, rus.] 41-3082

- Development of swamps and paludal forests in western Siberia. Efremov, S.P., et al., [1986, p.26-29, rus.] 41-3743

- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed., [1984, 160p., rus.] 41-4086

- Hydroclimatic regionalization of West Siberia from space photographs. Gerasimova, S.M., [1984, p.16-25, rus.] 41-4087

- Sub drainage systems in cryogenic peat soils. Loginov, I.I., et al., [1984, p.51-52, rus.] 41-4089

- Cryosphere and the quality of soil melioration processes. Melnikov, P.I., et al., [1986, p.94-98, rus.] 41-4468

- Land reclamation under permafrost conditions. [1984, p.19-24, rus.] 41-4484

- Prospects and possible consequences of hydraulic meliorations in western Siberia. Malik, L.K., [1986, p.77-89, rus.] 41-4573

- See also: Revegetation

- Landforms**

- Present-day geomorphological processes on Prins Oscars Land, Svalbard. Ruedberg, S., [1986, p.41-63, eng.] 41-1845

- Experimental frost shattering of some precambrian rocks, Finland. Lautridou, J.P., et al., [1986, p.89-100, eng.] 41-1847

- Classification of exogenic relief-forming processes on land. Vyrtkin, V.B., [1986, p.20-24, rus.] 41-2247

- Arctic route geotechnical characterization and analysis: a systems approach. Vita, C.L., [1986, 271p., eng.] 41-2645

- Landforms and sediments produced by glaciers in Iceland. Sharp, M.J., [1982, 380p. + append., eng.] 41-3141

- Arctic Heritage Symposium, Banff, Alta., 1985. [1987, 653p., eng.] 41-3232

- Arctic landforms: the formative processes. Bird, J.B., [1987, p.75-79, eng.] 41-3234

- Grass-shrub vegetation developing on Arctic sand dunes. Sergienko, V.G., [1987, p.208-215, rus.] 41-3610

- Moraine formation at Soler Glacier, Patagonia. Aniya, M., [1987, p.107-117, eng.] 41-3835

- See also: Offshore landforms

- Landing strips**

- See: Aircraft landing areas; Ice runways; Runways

- LANDSAT**

- Brunt Ice Shelf flow, 1974-1985, from Landsat images. Simmons, D.A., [1986, p.252-254, eng.] 41-686

- Multispectral digital image mapping of antarctic ice features. Swithinbank, C., et al., [1986, p.159-163, eng.] 41-761

- Landscape development**

- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). [1986, 126p., rus.] 41-2213

- Relation between the susceptibility of permafrost landscapes and topographic dissection. Klimovskii, I.V., et al., [1986, p.113-121, rus.] 41-3492

- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed., [1985, 160p., rus.] 41-4118

- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus.] 41-4120

- Landscape types**

- Pine forest successions in Karelian taiga. Gromtsev, A.N., [1985, p.46-61, rus.] 41-193

- Subdivision of the Bam zone according to vegetational cover. Belov, A.V., ed., [1985, 181p., rus.] 41-252

- Modeling tundra populations and communities. Balbikov, E.V., et al., [1986, p.207-219, rus.] 41-548

- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Brattsev, A.P., ed., [1986, 119p., rus.] 41-1167

- Southern tundras in the system of zonal subdivision. Chernov, I.U.I., et al., [1986, p.192-204, rus.] 41-1341

- Hydrologic investigations of landscapes. Bachurin, G.V., et al., [1986, 208p., rus.] 41-1365

- Natural water bodies as indicators of landscapes. Ascev, V.V., et al., [1986, p.75-80, rus.] 41-1369

- Formulas for calculating hydrologic characteristics of East Siberian rivers. Petenkov, A.V., [1986, p.132-136, rus.] 41-1371

- Allowing for physiographic factors in estimating maximum river runoff for the swampy forest zone of Priirtysh'e. Trofimova, E.V., [1986, p.143-147, rus.] 41-1372

- Possibility of distinguishing landscape types and evaluating their hydrologic properties from space photographs. Markus, I.A.A., [1986, p.153-159, rus.] 41-1373

- Regularities governing the formation of river water resources in Siberia. Plitkin, G.A., [1986, p.171-180, rus.] 41-1374

- Plant distribution in nival communities of the Chukotskiy Peninsula. Razzhivin, V.I.U., [1986, p.1088-1097, rus.] 41-1456

- Variability of hydrological characteristics in western Siberia. Nikitin, S.P., et al., [1986, 204p., rus.] 41-1969

- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). [1986, 126p., rus.] 41-2213

- Peculiarities of ecosystems distribution in the Barents Sea. Golikov, A.N., et al., [1986, p.7-8, rus.] 41-1386

- Landscape approach to forecasting cryogenic processes. Stashenko, A.I., [1986, p.191-199, rus.] 41-2840

- Geophysics and man-induced changes of landscapes in the Chukotskiy Peninsula. Ignatenko, I.V., et al., [1987, 271p., rus.] 41-3247

- Urban planning and construction problems in Siberia. Krushinskii, V.I., [1986, p.40-45, rus.] 41-3259

- Rational use and preservation of ecosystems in the North. Pivchenko, N.I., [1985, p.68-75, rus.] 41-3437

- Methods of evaluating and mapping the susceptibility of cryogenic landscapes. Fedorov, A.N., et al., [1986, p.121-133, rus.] 41-3493

- Cryogenic factor in the evolution of landscape-geodynamic structures. Sadovskii, A.I., et al., [1986, p.153-165, rus.] 41-3496

- Modeling of processes in landscape-geochemical systems. Sysuev, V.V., [1986, 301p., rus.] 41-3512

- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed., [1986, 192p., rus.] 41-3513

- Use of satellite information in geocryological surveys for landscape regionalization. Shtefnrener, A.F., et al., [1986, p.49-54, rus.] 41-3517

- Remote sensing techniques in studying seasonal dynamics of landscapes. Elagin, I.N., [1986, p.159-169, rus.] 41-3972

- Landscape conditions, hydrology and hydrochemistry of lakes in Central Priob'e. Tiul'kova, L.A., [1986, p.64-66, rus.] 41-3977

- See also: Alpine landscapes; Arctic landscapes; Deserts; Forest land; Forest tundra; Karst; Ocean environments; Steppes; Subarctic landscapes; Subpolar regions; Taiga; Tundra

- Landslide control**

- Development of landslide processes in the lower Ob' River valley. Okhalin, S.N., et al., [1986, p.106-116, rus.] 41-4574

- Landslides**

- Mars: periglacial and glacial relief forms. Lucchitta, B.K., [1986, p.183-193, rus.] 41-550

- Ice avalanches and a landslide on Grosser Aletschgletscher. Alean, J., [1984, p.9-25, eng.] 41-622

- Types of mudflows and danger areas in the Kirghiz Range. Bobushev, T.S., [1984, p.35-41, rus.] 41-725

- Bibliography of landslides in Alaska. Galloway, J.P., [1986, 54p., eng.] 41-797

- Use of water resources and the formation of water-reservoir shores in Siberia. Kukskovskii, V.S., et al., [1986, p.3-7, rus.] 41-811

- Ground water level rise in Siberia and the Far North and East. Gospodinov, D.G., [1985, p.27-33, rus.] 41-1363

- Examples of studying landslide processes in Canada. Rechitskii, V.I., [1986, p.96-104, rus.] 41-2548

- Engineering geology in construction. Ziangirov, R.S., et al., [1986, 175p., rus.] 41-2889

- Groundwater models for mountain slopes. Okunishi, K., et al., [1987, p.265-285, eng.] 41-3043

- Engineering geology of the Government Hill area, Anchorage, Alaska. Updike, R.G., et al., [1986, 32p., eng.] 41-3224

- Regime of glaciers in central Tien Shan. Dikikh, A.N., et al., [1986, 136p., rus.] 41-3805

- Permafrost distribution and slope processes in central Tien Shan. Tarakanov, A.G., [1986, p.98-109, rus.] 41-3807

- Rock avalanche from the peak of Mount Meager, British Columbia. Evans, S.G., [1987, p.929-933, eng.] 41-4017

- Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed., [1986, 135p., rus.] 41-4572

- Landslide disaster in Niigata Prefecture, 1985. [1985, p.73-92, jpn.] 41-4585

- Comparison between the cracks of landslide debris and glacier cracks. Fujita, Y., [1985, p.49-55, jpn.] 41-4590

- Influence of the melted snow water on landslides. Yoshida, S., [1985, p.91-97, jpn.] 41-4591

- Activities of the Research Institute for Hazards in Snowy Areas, Japan. [1985, p.127-160, jpn.] 41-4594

- See also: Mudflows

# Large panel buildings

- Microclimate and temperature-humidity regime of building enclosures in the North. Vas'kovskii, A.P., [1986, 165p., rus] 41-1681
- Recommendations for the factory finishings of new standard house facades for northern towns. Kholopova, L.I., et al, [1986, 39p., rus] 41-3021
- Formation and development of the Kola Mining Complex. Peshev, N.G., ed, [1986, 123p., rus] 41-4556
- Efficiency of producing and using lightweight concretes for construction in the Murmanak region. Nesterov, V.V., et al, [1986, p.62-67, rus] 41-4557

# Large unit construction

See: Modular construction

# Lasers

- Methods of measuring avalanche velocity using laser range finders. Urumbaev, N.A., et al, [1985, p.15-22, rus] 41-839
- Devices for measuring snow avalanche velocities. Bagov, M.M., et al, [1985, p.22-30, rus] 41-840

# Latent heat

- Latent heat thermal energy storage. Saito, A., et al, [1986, p.2946-2952, eng] 41-2109
- Heat transfer characteristics of a latent heat storage unit. Saaguchi, K., et al, [1986, p.2978-2992, eng] 41-2110
- Outward phase change in a cylindrical annulus with circumferential fins. Padmanabhan, P.V., et al, [1986, p.1773-1779, eng] 41-3295
- Nomographs for meltwater determination. Ambach, W., et al, [1986, p.181-189, eng] 41-4357
- Nomographs for the determination of meltwater from snow and ice surfaces. Ambach, W., [1986, p.7-15, eng] 41-4358

# Lattice models

- Extended lattice model of water; two-sublattice, two-orientation model. Meijer, P.H.E., et al, [1982, p.124-142, eng] 41-2245
- On the application of lattice statistics to bubble trapping in ice. Enting, I.G., [1987, p.100-113, eng] 41-3195

# Latticed structures

- Ice clathrate and hexagonal ice at 77 K. Johari, G.P., et al, [1986, p.311-315, eng] 41-1237

# Laws

See: Legislation

# Lead iodide

- Ice nucleating behaviour of PbI<sub>2</sub> in the presence of soluble salts. Gobinathan, R., et al, [1981, p.1527-1533, eng] 41-2255

# Leakage

See: Air leakage

# Legislation

- Implementation of the United States Arctic Research and Policy Act of 1984. Brown, J., [1986, p.155-168, eng] 41-956
- Arctic Research and Policy Act of 1984 and its significance for the library and information community. Thuronyi, G.T., et al, [1986, p.183-190, eng] 41-973
- United States: an arctic nation. [1987, 46p., eng] 41-2566
- Management of Arctic marine transportation: a Canadian perspective. McRae, D.M., [1986, p.350-359, eng] 41-2691
- U.S.-Canadian cooperation in the Arctic. Friedheim, R.L., [1986, p.360-367, eng] 41-2692
- Jurisdiction and management of Arctic marine transportation. Westermeyer, W.E., et al, [1986, p.338-349, eng] 41-2725
- National needs in Arctic research. Washburn, A.L., [1987, p.2-9, eng] 41-2764
- Report of the U.S. Arctic Research Commission, 1985. [1986, 33p., eng] 41-3425
- NOAA Information Services for U.S. Arctic Marine Operations. [1986, 77p., eng] 41-3508
- Science and public policy; program and abstracts of the conference. [1984, 251p., eng] 41-3615

# Level

See: Sea level; Water level

# Lichens

- Intrasaccular glacier variations in northern Tien Shan according to lichenometric data. Pomortsev, O.A., [1986, p.403-412, rus] 41-886
- Botany of Bouvet Island. [1986, 79p., eng] 41-915
- Macrolichens of Bouvetøya. Jørgensen, P.M., [1986, p.23-34, eng] 41-918
- Crustose lichens of Bouvetøya. Øvstedal, D.O., [1986, p.35-56, eng] 41-919
- Lichenicolous ascomycetes from Bouvetøya. Øvstedal, D.O., et al, [1986, p.57-60, eng] 41-920
- Transplantation methods for lichen indication. Trass, Kh.Kh., [1985, p.140-144, rus] 41-1041
- Lichen growth in the central Brooks Range, Alaska. Haworth, L.A., et al, [1986, p.289-296, eng] 41-1177
- Pollen deposition and distribution of shrubs in the Arctic tundra. Jacobs, J.D., et al, [1985, p.279-287, eng] 41-1249
- Southern tundras of Taymyr. Chernov, I.U.I., ed, [1986, 206p., rus] 41-1331
- Dating slope deposits and estimating rates of rock wall retreat in Northwest Spitzbergen by lichenometry. André, M.F., [1986, p.65-75, eng] 41-1846

- Climate and glaciation in Kong Karls Land, eastern Svalbard. Holmgren, B., et al, [1984, p.291-302, eng] 41-2007

- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed, [1986, 198p., rus] 41-2373

- Dynamics of plant communities following the felling of forest. Ziabchenko, S.S., [1986, p.5-22, rus] 41-2374

- Soil restoration in felled areas of bilberry pine forests. Voronova, T.G., [1986, p.22-31, rus] 41-2375

- Growth of rock lichens in low-Arctic mountain environment, Labrador. Rogerson, R.J., et al, [1986, p.85-91, eng] 41-2707

- Problems of physical geography and geobotanics. Selected works. Sochava, V.B., [1986, 343p., rus] 41-2753

- Brio-lichenologic investigations in the USSR. Shliakov, R.N., ed, [1986, 118p., rus] 41-2775

- Lichens in western Chukot highlands (Paliavaam River). Makarova, I.I., [1986, p.105-108, rus] 41-2778

- Lichens in fir-spruce forests of Sikhote Alin Mountains. Skirina, I.F., et al, [1986, p.111-112, rus] 41-2779

- Classification of the lichen and green-moss pine forests of the northwestern European USSR. Sambuk, S.O., [1986, p.1468-1479, rus] 41-3023

- Forest fire effect on tundra vegetation. Polozova, T.G., [1986, p.1657-1663, rus] 41-3025

- Changes in ecosystems of the North due to economic development. Kriuchkov, V.V., [1985, p.76-83, rus] 41-3438

- Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., [1986, p.62-63, rus] 41-3541

- Lichens from central East Greenland. Hansen, E.S., [1982, 36p., eng] 41-3788

- Lichen distribution along an alpine tundra ridge in the High Uintas of northeastern Utah, U.S.A. St. Clair, L.L., [1985, 155p., eng] 41-3797

- Studying pollutant accumulation in air, snow and vegetation. Kazachevskii, I.V., et al, [1987, p.91-102, rus] 41-3947

- Bioindications of natural environments in the North. Kriuchkov, V.V., [1987, p.60-67, rus] 41-4568

# Light effects

- Intracellular photosynthate allocation and the control of Arctic marine ice algal production. Smith, R.E.H., et al, [1987, p.124-132, eng] 41-3998

# Light scattering

- Scattering corrections to extinction coefficients of falling snow. Winchester, L.W., Jr., et al, [1983, p.86-89, eng] 41-2315
- Multiple-scattering effects in halo phenomena. Trinkle, E., et al, [1987, p.551-599, eng] 41-3152
- Scattering photometer for measuring single ice crystals and liquid droplets. Pluchino, A., [1987, p.614-620, eng] 41-3153
- Scattering and absorption of visible light by sea ice. Buckley, R.G., et al, [1987, p.867-869, eng] 41-3639
- Raman scattering spectra at the water-ice phase transition. Glushkov, S.M., et al, [1986, p.836-839, rus] 41-3686
- Extinction coefficient measurement in falling snow. Koh, G., [1987, 9p., eng] 41-3849

# Light transmission

- Spectral distribution of light under a subarctic winter lake cover. Roulet, N.T., et al, [1986, p.89-95, eng] 41-484

- Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al, [1984, p.159-165, eng] 41-1280

- Low-temperature behaviour of high-birefringence fibres. Marrone, M.J., et al, [1985, p.703-704, eng] 41-1410

- Scattering corrections to extinction coefficients of falling snow. Winchester, L.W., Jr., et al, [1983, p.86-89, eng] 41-2315

- Visible and infrared transmission through snow. Seagraves, M.A., et al, [1983, p.90-93, eng] 41-2316

- Obscuration by helicopter-produced snow clouds. Ebersole, J.F., [1983, p.94-99, eng] 41-2317

- Photosynthesis and carbon metabolism of phytoplankton from McMurdo Sound, Pt.1. Rivkin, R.B., et al, [1987, p.249-259, eng] 41-2504

- Spectral downwelling irradiance in an antarctic lake. Palmisano, A.C., et al, [1987, p.145-151, eng] 41-3426

# Light (visible radiation)

- Spectral downwelling irradiance in an antarctic lake. Palmisano, A.C., et al, [1987, p.145-151, eng] 41-3426

# Lightweight concretes

- Behavior of lightweight concretes at cryogenic temperatures. Berner, D.E., et al, [1985, p.439-445, eng] 41-3990
- Increasing the thermoinsulative properties of lightweight concrete panels. Natsievskii, I.U.D., [1986, 88p., rus] 41-2647
- Improving thermotechnical properties of lightweight concretes for external wall panels. Fedorov, V.A., et al, [1987, p.36-37, rus] 41-2794
- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] 41-2919

- Qualities of lightweight concrete used for Arctic offshore platform. Tachibana, D., et al, [1987, p.7-15, eng] 41-2922

- Reducing the amount of construction materials needed under conditions of Siberia and the Far East. Nesterov, V.V., [1986, 136p., rus] 41-3157

- Research in building engineering. Structural thermodynamics. Service life of structures. Polonakii, V.P., ed, [1986, 179p., rus] 41-4500

- Plasticity of lightweight concrete at cryogenic temperatures. Roelasy, F.S., et al, [1987, p.3-17, eng] 41-4543

- Formation and development of the Kola Mining Complex. Peshev, N.G., ed, [1986, 123p., rus] 41-4556

- Efficiency of producing and using lightweight concretes for construction in the Murmanak region. Nesterov, V.V., et al, [1986, p.62-67, rus] 41-4557

# Limestones

- Plant distribution in nival communities of the Chukotskiy Peninsula. Razzhivin, V.I.U., [1986, p.1088-1097, rus] 41-1456

# Limnology

- Sources of organic nitrogen, phosphorus and carbon in antarctic streams. Downes, M.T., et al, [1986, p.215-225, eng] 41-613

- Alph River ecosystem in southern Victoria Land. Howard-Williams, C., et al, [1986, p.21-33, eng] 41-2871

- Arctic Heritage Symposium, Banff, Alta., 1985. [1987, 633p., eng] 41-3232

- Northern limnological processes: research and management. Adams, W.P., [1987, p.112-146, eng] 41-3236

- Spectral downwelling irradiance in an antarctic lake. Palmisano, A.C., et al, [1987, p.145-151, eng] 41-3426

- Water depth of Lagoon San Rafael, Patagonia. Nakajima, C., et al, [1987, p.103-105, eng] 41-3834

- Limnology of Garrow Lake, NWT, Canada. Dickman, M., et al, [1987, p.531-549, eng] 41-3854

- Landscape conditions, hydrology and hydrochemistry of lakes in Central Proib'e. Tiul'kova, L.A., [1986, p.64-66, rus] 41-3977

- Diamictic mass in glacial Lake Maumee III sediments, S.W. Ontario. Stewart, R.A., [1987, p.844-849, eng] 41-4082

- Humic substances from a blue lake on the Greenland ice cap. Gadel, F., et al, [1987, p.107-109, eng] 41-4140

- Comment on "Oxygen budget of a perennially ice-covered antarctic lake (and Reply). Top, Z., [1987, p.520-521, eng] 41-4226

- Nitrification: a significant cause of oxygen depletion under winter ice. Knowles, R., et al, [1987, p.743-749, eng] 41-4229

- Crystallography of Patterned Lake, Framnes Mountains. Chambers, J.L.C., et al, [1986, p.520-526, eng] 41-4307

- Lake ice, radiation, and oxygen deficit at temperate lakes. Prowse, T.D., et al, [1986, p.386-403, eng] 41-4536

See also: Lakes

# Linings

- Shaft sinking in water-bearing noncompetent strata in China. Ma, Y., et al, [1985, p.1434-1437, eng] 41-857

- Frost heave of a channel with concrete lining. Zhu, D., et al, [1986, p.201-208, chj] 41-1416

- Anti-heave effect of wind-blown sands in irrigation canals. Zhu, D., et al, [1986, p.239-244, chj] 41-1422

- Soil slope stability in a channel with plastic lining. Zhou, L., [1986, p.245-248, chj] 41-1423

- Salt and frost heave damage of lining in hydraulic structures. Wang, Y., [1986, p.291-294, chj] 41-1433

- Concrete linings of hydraulic structures to prevent frost heave. Zhu, C., [1986, p.309-312, chj] 41-1437

- Frost damage of a channel with concrete lining. Luo, Y., [1986, p.313-318, chj] 41-1438

- Designing canal linings for frost heaving ground. Alimov, A.G., [1986, p.19-24, rus] 41-2554

- Concrete lining of tunnels. Belkin, M.N., et al, [1987, p.63-67, rus] 41-3809

# Liquefied gases

- Marine transportation of liquefied gases. Kozyrev, V.K., [1986, 206p., rus] 41-2872

- Effects of ice action under conditions of the lower connections of spherical liquefied-gas tanks. Pavel, A., [1986, p.628-630, rus] 41-3069

- Low-temperature service facilities and recent status of their materials and welding. Saiga, Y., et al, [1986, p.1-21, eng] 41-3785

# Liquid phases

- Cubic ice from liquid water. Mayer, E., et al, [1987, p.601-602, eng] 41-3637

# Liquid solid interfaces

- On free convection melting of a solid immersed in a hot dissimilar fluid. Chen, M.M., et al, [1986, p.1087-1093, eng] 41-3993
- Analysis of melting around a moving heat source. Moallemi, M.K., et al, [1986, p.1271-1282, eng] 41-3994

**Liquid solid interfaces (cont.)**

- Freezing of liquid-saturated porous media. Weaver, J.A., et al, 1986, p.654-659, eng 41-396
- Energy loss of snow/water mixture flow at a T-junction of pipes. Shirakashi, M., et al, 1986, p.75-82, jpn 41-440
- Blockage of flow resulting from freezing of liquid. Creighton, D.L., et al, 1978, p.37-42, eng 41-468
- Effects of radiation on the melting of a semi-transparent, semi-infinite medium. Cho, C., et al, 1978, p.373-378, eng 41-470
- Free energies of crystal-vapor systems. Broughton, J.Q., et al, 1986, p.5741-5748, eng 41-497
- Structure and dynamics of crystal-melt systems. Broughton, J.Q., et al, 1986, p.5749-5758, eng 41-498
- Surface free energies of crystal-liquid systems. Broughton, J.Q., et al, 1986, p.5759-5768, eng 41-499
- Numerical simulation of melting of ice around a horizontal cylinder. Ho, C.J., et al, 1986, p.1359-1369, eng 41-564
- Thermocapillary free boundaries in crystal growth. Cuvelier, C., et al, 1986, p.1-26, eng 41-826
- Outward melting in a cylindrical annulus. Ho, C.J., et al, 1986, p.240-245, eng 41-850
- Self-diffusion coefficient at the solid-liquid interface. Ragheli, B., 1986, p.4667-4668, eng 41-1440
- Freezing temperatures of water, alkanolic acids and their mixtures. Barr, R.S., et al, 1986, p.79-86, eng 41-2017
- Self-simulating multivariate Stefan problem. Shmarev, S.I., 1986, p.126-146, rus 41-2351
- Melting of frozen porous media contained in a cylindrical capsule. Weaver, J.A., et al, 1986, p.1943-1951, eng 41-2524
- Buoyancy and surface tension driven natural convection with solidification. Munakata, T., et al, 1986, p.1733-1738, eng 41-3292
- Liquid-solid phase change heat transfer. Masiulianec, K.C., et al, 1985, p.194-205, eng 41-3339
- Melting process within spherical enclosures. Roy, S.K., et al, 1987, p.460-462, eng 41-3757
- Liquids**
- Periodic phase transformations in liquids. Akulichev, V.A., et al, 1986, 280p., rus 41-1271
- Univariate single-phase Stefan problem of movement in liquid phase. Kulagina, N.A., 1985, p.36-49, rus 41-2350
- Crystallization of freezing mixture in porous media. Entov, V.M., et al, 1986, p.447-449, eng 41-3628
- See also: Frozen liquids
- Lithology**
- Geocryological research. Ershov, E.D., ed, 1986, 224p., rus 41-2080
- Geocryology—its subject and problems. Danilov, I.D., 1986, p.18-26, rus 41-2082
- Litter**
- Dynamics and hydrophysical properties of forest litter in the Krasnoyarsk forest steppes. Stakanov, V.D., et al, 1986, p.172-176, rus 41-816
- Fire effect on Siberian forests. Evdokimenko, M.D., 1984, p.56-65, rus 41-1080
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed, 1986, 198p., rus 41-2373
- Soil restoration in felled areas of bilberry pine forests. Voronova, T.G., 1986, p.22-31, rus 41-2375
- Decomposition of wood litter on felled areas of the North. Kozlovskaya, L.S., et al, 1986, p.92-107, rus 41-2378
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernen'kova, T.V., 1987, p.147-157, rus 41-4571
- Loading**
- Automation and powering of loading-unloading equipment. Sobkalov, I.P., et al, 1986, 128p., rus 41-2227
- Some experimental findings regarding the mechanical properties of shee ice. Epifanov, V.P., 1985, p.178-187, eng 41-2971
- Loads (forces)**
- Wind, earthquake, snow, and hail loads on solar collectors. Cattaneo, L., et al, 1981, 88p., eng 41-173
- Trial construction of 20-m span ice dome. Kokawa, T., et al, 1986, p.67-73, jpn 41-439
- Investigation of seasonal load restrictions in Washington State. Mahoney, J.P., et al, 1985, p.58-67, eng 41-609
- Dynamic properties of frozen granular soils. Li, J.C.-C., 1979, 335p., eng 41-897
- Studies of plain and reinforced frozen soil structures. Soo, S., 1984, 299p., eng 41-984
- Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al, 1986, p.175-196, eng 41-1095
- Ice fracture mechanics and some of its applications. Goldstein, R.V., et al, 1986, p.197-210, eng 41-1096
- Determination of pore ice stresses in frozen soils. Yousef, H., 1986, p.262-282, eng 41-1101
- Mechanical properties and behaviour of frozen soils. Yousef, H., 1986, p.299-322, eng 41-1103
- Development of composite members for Arctic offshore structures. Shioya, T., et al, 1986, p.660-677, eng 41-1123

- Viscoelasticity of floating ice plates under loads. Hui, D., 1986, p.135-143, eng 41-1212
- Numerical evaluation of flexible footing settlement into uniform snowcover. Dandekar, B.W., et al, 1986, p.131-138, eng 41-1284
- Yield and failure envelope for ice under multiaxial compressive stresses. Nadreau, J.P., et al, 1986, p.75-82, eng 41-1306
- Plotting a theoretical diagram of loads on cutting tools. Zakharov, V.A., 1978, p.25-30, rus 41-1315
- Determining loads on multi-blade milling tools. Zakharov, V.A., 1978, p.30-36, rus 41-1316
- Frost-heave forces acting on the foundation base. Xu, Z., 1986, p.255-260, chi 41-1426
- Probabilistic theories for the failure of sea ice. Maes, M.A., et al, 1986, p.37-54, eng 41-1581
- Centrifugal modelling of sea ice. Lovell, M.S., et al, 1986, p.105-113, eng 41-1586
- Wind over ice: a mechanism for the generation of ice-coupled waves. Squire, V.A., 1986, p.115-128, eng 41-1587
- Sea ice testing in flexure—the importance of shear deformations. Murat, J.R., et al, 1986, p.209-224, eng 41-1593
- Fracture toughness of freshwater ice as a function of loading rate. Nixon, W.A., et al, 1986, p.287-296, eng 41-1599
- Transverse deformation of loaded concrete at low temperature. Elices, M., et al, 1986, p.741-748, eng 41-1999
- Thermal deformation of lightweight concretes at low temperature. Corres, H., et al, 1986, p.845-852, eng 41-2001
- Thermal deformation of loaded concrete. Planas, J., et al, 1984, p.639-644, eng 41-2003
- Behavior of laterally loaded piles in permafrost. Neukirchner, R.J., et al, 1987, p.1-14, eng 41-2115
- Analysis of laterally loaded piles in permafrost. Neukirchner, R.J., 1987, p.15-29, eng 41-2116
- Loading effect on compressive strength of polycrystalline ice. Haerle, R.N., 1986, c25p., eng 41-2130
- Effects of rate, temperature and microstructure on ice cracks. Nixon, W.A., 1986, 6p., eng 41-2135
- Fracture toughness of single crystal ice and columnar grained ice. Kusumoto, S., et al, 1985, p.19-27, jpn 41-2186
- Study of fracture toughness of columnar grained ice using large specimens. Kusumoto, S., et al, 1986, p.887-891, jpn 41-2200
- Viscoelasticity of ice under different loading conditions. Hamza, H., 1987, p.151-157, eng 41-2416
- Kinematic model of ice penetration with lateral loading. Young, C.W., et al, 1986, p.473-479, eng 41-2672
- Response of penetrators into ice targets. Kipp, R.J., et al, 1986, p.481-493, eng 41-2673
- Hydrodynamic forces and iceberg stability. Bass, D.W., et al, 1986, p.60-62, eng 41-3092
- Analysis of potential slope instability due to wave loading on the Nova Scotian shelf. Moran, K., et al, 1986, p.980-999, eng 41-3171
- Torsional resistance of a single pile in a layered soil. Hache, R.A.G., et al, 1986, p.1004-1019, eng 41-3172
- Law observed in the generation of sound in ice samples subjected to loading. Mitiaev, P.V., et al, 1986, p.168-169, rus 41-3240
- Formation of loads on underground structures in thawing disperse ground. Sokolov, M., 1986, p.24-25, rus 41-3735
- Equation for avalanche motion restricted by a diversion barrier. Nohguchi, Y., 1987, p.153-162, jpn 41-4006
- Reinforced earth slab to reduce embankment loads, Auke Bay, Alaska. Elias, V., et al, 1981, 21p., eng 41-4067
- Limit state probabilistic design of offshore Arctic pipelines. Row, D.G., et al, 1987, p.115-123, eng 41-4632
- See also: Dynamic loads; Ice loads; Ice pressure; Snow loads; Soil pressure; Static loads; Water pressure; Wind pressure
- Loams**
- Thermal properties of cryogenic meadow-chernozem soils. Kulikov, A.I., 1984, p.126-130, rus 41-4090
- Micromorphological characteristics of humus profile in loamy taiga soils. Rusanova, G.V., 1986, p.69-77, rus 41-4564
- Humus profiles in the paludified loamy podzols of taiga. Vtiurin, G.M., 1986, p.78-88, rus 41-4565
- Locks (waterways)**
- Field measurements of the adhesion strength of ice. Makkonen, L., et al, 1986, p.725-734, eng 41-1128
- Loess**
- Reaction of loess soils with hydrofluosilicic acid and carbamide resins. Zgadzai, L.K., et al, 1986, p.53-57, rus 41-601
- Loess deposits of the USSR. Sergeev, E.M., ed, 1986, 2 volumes (only Vol.2 pertinent), rus 41-620
- Soil stabilization by wetting and detonation. Takhirov, I.G., et al, 1986, p.16-19, rus 41-880
- Modified method for intensive dynamic compaction of weak soils. Marinescu, K., 1986, p.73-78, eng 41-1851

- Pleistocene glaciations in East Asia. Bessalyi, V.G., ed, 1984, 212p., rus 41-1910
- Glacier ice in Quaternary deposits of the Malys-Siyenskaya basin. Bessalyi, V.G., et al, 1984, p.107-116, rus 41-1911
- Peculiarities of studying the Pleistocene Edoma series of the northeastern USSR. Tomirdiario, S.V., et al, 1984, p.159-173, rus 41-1912
- Origin of Edoma deposits. Zhestkova, T.N., et al, 1986, p.108-113, rus 41-2090
- Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka). Kotov, A.N., et al, 1986, p.114-120, rus 41-2091
- Topographic analysis of the lower Kolyma River for cryolithologic mapping. Kaplina, T.N., et al, 1986, p.51-60, rus 41-2819
- Engineering geology in construction. Ziangirov, R.S., et al, 1986, 175p., rus 41-2889
- Numerical modeling of loess structure for forecasting its sustained strength. Anikin, V.S., et al, 1986, p.34-42, rus 41-3394
- Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, 1987, p.113-119, rus 41-3771
- Development of ice-vein pseudomorphs in the Russian plain. Minervin, A.V., et al, 1986, p.90-100, rus 41-4469
- Logistics**
- Deployment and operation of the ice stations for the FRAM program. Heiberg, A., et al, 1985, p.429-432, eng 41-222
- Planned New Zealand antarctic activities 1986-87. 1986, 26p., eng 41-382
- Modifications to the 1985/86 New Zealand antarctic research program. 1986, 4 leaves, eng 41-383
- Megastructures for mobilization. Flanders, S.N., 1986, p.10-11, eng 41-410
- Northern latitude logistic support. Kover, D., 1986, p.435-438, eng 41-945
- Geophysical fieldwork on the Ronne Ice Shelf. Herrod, L.D.B., et al, 1986, p.9-14, eng 41-1786
- Air/ground transportation in Antarctic logistics support. Baker, M.J., et al, 1986, p.376-419, eng 41-2037
- Logistics support for Arctic scientific camps and drifting ice stations. Hobson, G.D., 1986, p.462-472, eng 41-2039
- Icebreaking operations in McMurdo Sound, Antarctica. Wubbald, J.H., 1986, p.523-530, eng 41-2043
- Operating and design of antarctic resupply vessels. Mercer, C.L., et al, 1986, p.531-547, eng 41-2044
- Operating experiences with the *Polarstern* in Antarctica. Suhrmeyer, L., et al, 1986, p.548-562, eng 41-2045
- Tracked firefighting vehicles for the Arctic and Antarctic. Puschi, A.A., 1986, p.649-669, eng 41-2049
- Arctic logistics and supporting services. Westerberg, T., et al, 1986, 16p., eng 41-2283
- United States: an arctic nation. 1987, 46p., eng 41-2566
- Operation Deep Freeze 87 end of season report. 1987, Var. p., eng 41-3164
- Ice Island underfoot. Chilingarov, A., et al, 1986, 175p., rus 41-3250
- Ship operations, 1984-1985. Marthaler, J.G., 1985, p.267-269, eng 41-3328
- Report of the U.S. Arctic Research Commission, 1985. 1986, 33p., eng 41-3425
- Ice core drilling operations in the Northern Patagonia Icefield. Yamada, T., et al, 1987, p.151-155, eng 41-3840
- Long range forecasting**
- Long-range forecasting of Grand Banks iceberg severity. Davidson, L.W., et al, 1986, 163p., eng 41-1835
- Regional regularities governing long-range freeze-thaw of ground. Kuznetsova, I.L., et al, 1986, p.176-183, rus 41-2838
- Low temperature research**
- Luminescence studies of condensed phases at low temperatures. Variano, B.F., et al, 1986, p.497-498, eng 41-960
- Picovoltmeters used in low-temperature research. Krasnopolin, I.I.A., 1986, p.1427-1431, eng 41-994
- Automatic low-temperature calorimeter. Malyshev, V.M., et al, 1986, p.1456-1459, eng 41-995
- Zones and excitons of cryocrystals. Sobolev, V.V., 1986, 206p., rus 41-997
- Low temperature tests**
- Avoiding low temperature brittle failures of oil storage tanks. Fraylick, J.R., 1986, p.125-130, eng 41-78
- Low temperature excess loss of loose tube fiber cables. Stuefflotten, S., 1982, p.4300-4307, eng 41-263
- Transmission loss of coated single-mode fiber at low temperatures. Katsuyama, Y., et al, 1980, p.4200-4205, eng 41-264
- Excess loss of single-mode jacketed optical fiber at low temperature. Yabuta, T., et al, 1983, p.2356-2362, eng 41-486
- Fiber optics in adverse environments. Lyons, P.B., ed, 1981, 276p., eng 41-579
- X ray attenuation at low temperatures in polymer silica fibers. Barnes, C.E., et al, 1981, p.25-34, eng 41-580



- Response of irradiated optical waveguides at low temperatures. Taylor, E.W., et al, [1981, p.40-50, eng] 41-581
- Cold-induced losses in loose-sheath fiber-optic cables. Holliday, V.M., et al, [1981, p.77-79, eng] 41-582
- Non-metallic optical fiber cable for use under low temperature. Ogai, M., et al, [1981, p.12(2-1)-12(2-4), eng] 41-660
- Amorphous ice made by "melting" ice I. Whalley, E., [1986, p.314-318, eng] 41-891
- Elastoplastic deformation of steel at low temperatures. Zhigalkin, V.M., et al, [1986, p.129-141, rus] 41-1017
- Ice clathrate and hexagonal ice at 77 K. Johari, G.P., et al, [1986, p.311-315, eng] 41-1237
- Comparative specification of engineering thermometers for low temperatures. Tian, L.S., et al, [1986, p.259-262, eng] 41-1407
- Low-temperature behaviour of high-birefringence fibres. Marrone, M.J., et al, [1985, p.703-704, eng] 41-1410
- Steel plates for low temperature uses. Yamada, M., et al, [1984, p.28-38, eng] 41-1569
- Behavior of prestressed lightweight concrete subjected to high-intensity cyclic stress at cryogenic temperatures. Berner, D.E., et al, [1986, p.727-736, eng] 41-1865
- Transmission loss at low temperature of an optical fibre. Yamakawa, S., et al, [1984, p.199-201, eng] 41-1916
- Thermal deformation of lightweight concretes at low temperature. Correa, H., et al, [1986, p.845-852, eng] 41-2001
- Low-temperature effects on flow in sand-bed streams. Lau, Y.L., [1987, p.111-115, eng] 41-2067
- Unfrozen compartmentalized water in gels during cooling and warming. Murase, N., et al, [1986, p.5420-5426, eng] 41-2107
- Low-temperature mechanical properties of asphalt concrete. Kallas, B.F., [1982, 53p., eng] 41-2136
- High-vacuum seal for low temperatures. Dubovitskiĭ, I.U.A., et al, [1987, p.950-951, eng] 41-3158
- Cryostat with 3He-vapor evacuation. Gershenzon, M.E., et al, [1987, p.979-981, eng] 41-3159
- Nitrogen cryostat for study of Moesbauer scattering. Goriachev, V.S., et al, [1987, p.981-983, eng] 41-3160
- Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al, [1986, p.29-33, rus] 41-3767
- Low-temperature service facilities and recent status of their materials and welding. Saiga, Y., et al, [1986, p.1-21, eng] 41-3785
- Low temperature cracking susceptibility of asphalt concrete. Janoo, V.C., et al, [1987, p.397-415, eng] 41-4030
- Lubricants**
- Ball bearing lubricants operating in various environments. McMurry, E.L., [1984, 18p., eng] 41-3041
- Luminescence**
- Luminescence studies of condensed phases at low temperatures. Variano, B.F., et al, [1986, p.497-498, eng] 41-960
- Machinery**
- Frost-resistant fluoroplastic seals for arctic machinery. Popov, S.N., et al, [1986, p.933-951, eng] 41-1139
- Machinery model propulsion tests in ice. Eskola, H., [1986, p.1001-1020, eng] 41-1143
- Developing machines and equipment for winter road maintenance. Tampon, T., [1983, p.268-269, fin] 41-1935
- Dredge-excavation of ground. Ogorodnikov, S.P., [1986, 256p., rus] 41-2913
- Oceanic thermal power plants. Il'in, A.K., [1987, p.96-112, rus] 41-4146
- Improvement of parameters and increase in the reliability of mining machines. Ponomarenko, I.U.P., ed, [1986, 82p., rus] 41-4524
- Improving the reliability of 204M excavators under northern conditions. Osipova, T.V., et al, [1986, p.11-16, rus] 41-4525
- Magnetic resonance**
- See: Nuclear magnetic resonance
- Magnetic surveys**
- Ice thickness measurements by magnetic surveys. Thorning, L., [1985, p.112-114, eng] 41-577
- Geophysical exploration methods in the Arctic. Gaponenko, G.I., ed, [1978, 165p., rus] 41-998
- Allowing for variations in electromagnetic surveys of the Arctic Basin. Karasik, A.M., et al, [1978, p.83-92, rus] 41-999
- Use of spectral-correlation analysis in preliminary stages of investigations. Petrova, A.A., [1978, p.93-98, rus] 41-1000
- Aeromagnetic surveys in Arctic shelf seas. Palamarchuk, V.K., et al, [1978, p.129-133, rus] 41-1001
- Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., [1986, 224p., rus] 41-1748
- Deformation by ice of sediment remanent magnetism. Day, T., [1986, p.78-81, eng] 41-3095
- Magnetism**
- See: Geomagnetism
- Maintenance**
- Dynamics of plant communities following the felling of forest. Zisachenko, S.S., [1986, p.5-22, rus] 41-2374
- See also: Road maintenance; Subgrade maintenance; Winter maintenance
- Manuals**
- Modular construction of oil and gas industry objects. Manual. Batalin, I.U.P., ed, [1986, 576p., rus] 41-1746
- Organization of construction under special environmental and climatic conditions. Construction manual. Shakhperonov, V.V., et al, [1986, 255p., rus] 41-2862
- Construction of electric power lines for main pipelines. Manual. Arnpolin, A.G., et al, [1986, 164p. (Pertinent p.127-138), rus] 41-2890
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, [1986, 328p., rus] 41-3664
- Mapping**
- Maximum southward advance of the Kara center ice sheet. Diatlova, I.N., [1986, p.154-157, rus] 41-125
- Regularities governing altitudinal belts of maximum river discharge in Tadzhikistan. Kemmerikh, A.O., [1986, p.166-170, rus] 41-128
- Methods of compiling medium-scale maps of genetic avalanche types. Dziuba, V.V., et al, [1986, p.206-211, rus] 41-136
- Experience in compiling and using complex engineering glaciological maps. Osokin, N.I., et al, [1986, p.213-219, rus] 41-137
- Structure and dynamics of forest landscapes in Karelia. Belousova, N.A., et al, [1985, 184p., rus] 41-189
- Types of landscapes in the Karelian ASSR. Volkov, A.D., et al, [1985, p.4-16, rus] 41-190
- Subdivision of the Bam zone according to vegetational cover. Belov, A.V., ed, [1985, 181p., rus] 41-252
- Surface velocity determination on large polar glaciers by aerial photogrammetry. Brecher, H.H., [1986, p.22-26, eng] 41-412
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] 41-571
- Avalanches and avalanche snow loads. Moskalev, I.U.D., [1986, 157p., rus] 41-631
- Atlas of the Arctic. Treshnikov, A.F., ed, [1985, 204p., rus] 41-701
- Symposium on Glacier Mapping and Surveying. Reykjavik, 1985. [1986, 216p., eng] 41-727
- History of mapping in Iceland, with special reference to glaciers. Tómasson, H., [1986, p.4-7, eng] 41-728
- Analysis and simulation of altimeter performance for the production of ice sheet topographic maps. Partington, K.C., et al, [1986, p.141-145, eng] 41-757
- Multispectral digital image mapping of antarctic ice features. Swinbank, C., et al, [1986, p.159-163, eng] 41-761
- Cartographic methods for large-scale glacier maps. Yin, S., et al, [1986, p.192-195, eng] 41-768
- Mudflow-hazard areas of northern Caucasus. Gerasimov, V.A., [1985, p.39-46, rus] 41-843
- Morphology and sediment processes and supply from Weddell Sea floor. Anderson, J.B., et al, [1986, p.121-129, eng] 41-1278
- Application of space imagery to geocryological mapping. Nekrasov, I.A., et al, [1985, p.187-195, eng] 41-1445
- Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, [1986, p.1-12, eng] 41-1469
- Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al, [1986, p.37-49, rus] 41-1537
- Establishing periods of stable snow cover duration in mountains. Tsarev, B.K., et al, [1986, p.73-78, rus] 41-1641
- Methods of compiling maps of the factors affecting avalanche formation in areas outside the USSR for the World Atlas of Snow and Ice Resources. Dziuba, V.V., [1986, p.81-86, rus] 41-1643
- Cartographic problems of applied glaciology. Alekseev, V.R., [1986, p.144-146, rus] 41-1657
- Problems of satellite meteorology and remote sensing. Sitnikova, M.V., ed, [1986, 104p., rus] 41-1684
- Mapping of territories with unstable snow covers. Solodkov, P.A., et al, [1986, p.82-84, rus] 41-1687
- Snow water reserves in central Altai. Chubenko, A.G., [1986, p.105-111, rus] 41-1968
- Variability of hydrological characteristics in western Siberia. Nikitin, S.P., et al, [1986, 204p., rus] 41-1969
- Geocryological mapping for regional surveying and design research. Garagulia, L.S., et al, [1986, p.38-45, rus] 41-2084
- Compiling maps for evaluating potential thermokarst sagging. Garagulia, L.S., et al, [1986, p.77-95, rus] 41-2087
- Geology and origin of the Elephant Moraine on the east antarctic ice sheet. Faure, G., et al, [1985, p.11-12, eng] 41-2623
- Topographic analysis of the lower Kolyma River for cryolithologic mapping. Kaplina, T.N., et al, [1986, p.51-60, rus] 41-2819
- Methods of classifying frost-heave parameters for compiling a map of rock-heave types. Lebedenko, I.U.P., [1986, p.83-96, rus] 41-2824
- Regionalization and mapping of permafrost. Trofimov, V.T., et al, [1985, p.66-72, rus] 41-2970
- Permafrost rocks of the Tsinghai-Sizan plateau of Tibet and their formation conditions. Tong, B., et al, [1986, p.68-79, eng] 41-3017
- Problems arising from collection and interpretation of data for a new glacier inventory. Secchieri, F., [1985, p.156-165, ita] 41-3184
- Regionalization of the Yakut ASSR for determining depths of placing geodetic markers. Bogdanov, B.G., [1986, p.30-31, rus] 41-3213
- Iceberg scour mapping for the Canadian East Coast. Lewis, C.F.M., [1987, 45p. + maps, eng] 41-3225
- Some aspects of the flow of the Ronne Ice Shelf. Doake, C.S.M., [1987, p.75-98, eng] 41-3275
- Ice-shelf backpressure: form drag versus dynamic drag. MacAyeal, D.R., [1987, p.141-160, eng] 41-3278
- Ice stream-ice shelf interaction in West Antarctica. Bindachadler, R.A., et al, [1987, p.161-180, eng] 41-3279
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] 41-3280
- Landat multispectral images of Antarctica applied to mapping and glaciology. Lucchitta, B.K., et al, [1985, p.256-259, eng] 41-3327
- Mapping permafrost in the boreal forest. Morrissey, L.A., et al, [1986, p.1513-1520, eng] 41-3472
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481
- Peculiarities of mapping rock glaciers. Gorbunov, A.P., et al, [1986, p.5-22, rus] 41-3482
- Geologic indication of ground ice in Tien Shan and Pamir. Ermolin, E.D., [1986, p.22-29, rus] 41-3483
- Map of distribution and discontinuity of permafrost in western Siberia. Fotiev, S.M., [1986, p.38-52, rus] 41-3485
- Compilation of a regional geocryological forecast based on small-scale maps of natural complexes in the cryolithosphere of western Siberia. Kritsk, L.N., et al, [1986, p.53-67, rus] 41-3486
- Regionalization of northwestern Siberia according to thermokarst development. Parmuzin, S.I.U., [1986, p.78-85, rus] 41-3488
- Possibilities of landscape indication in engineering-geological surveys of southern Central Yakutia. Gravis, G.F., et al, [1986, p.85-96, rus] 41-3489
- Differentiations of seasonally and perennially frozen rocks in Severnoe Priamur'e. Pozdniakov, I.V., [1986, p.96-106, rus] 41-3490
- Mapping frozen strata in troughs of the BAM zone. An, V.V., et al, [1986, p.106-113, rus] 41-3491
- Cryogenic factor in the evolution of landscape-geodynamic structures. Sadovskii, A.I., et al, [1986, p.153-165, rus] 41-3496
- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed, [1986, 192p., rus] 41-3513
- Spaceborne photography methods of monitoring geosystems in the new economic development areas of Siberia. Plastinin, L.A., [1986, p.9-14, rus] 41-3514
- Use of satellite information in geocryological surveys for landscape regionalization. Shteinbrenner, A.F., et al, [1986, p.49-54, rus] 41-3517
- Ground water naleds, central BAM. Defkin, B.N., et al, [1986, p.86-94, rus] 41-3520
- Contemporary methods in antarctic cartography. Reshetov, E.A., et al, [1986, p.23-25, rus] 41-3533
- Snow cover regime of the northern and central Kazakhstan. Petropavlovskaya, M.S., [1986, p.3-22, rus] 41-3584
- Tabular body of ground ice in the Ledianaya Gora outcrop. Karpov, E.G., [1986, p.267-272, eng] 41-3617
- Giant tabular iceberg data from satellite. McIntyre, N.F., et al, [1987, p.458-462, eng] 41-3677
- Surface windflow over the antarctic ice sheet. Parish, T.R., et al, [1987, p.51-54, eng] 41-3683
- Ice streams draining into the Ross Ice Shelf. Shabtaie, S., et al, [1987, p.1311-1336, eng] 41-3764
- Using GOES thermal infrared data to map citrus freeze zones. Shih, S.F., et al, [1987, p.737-743, eng] 41-3777
- Seismic bedrock depth measurements and the origin of George VI Sound, Antarctic Peninsula. Maslany, M.P., [1987, p.51-65, eng] 41-3811
- Remote sensing techniques used in solving geobotanical problems. Sharapov, V.N., ed, [1986, 191p., rus] 41-3970
- Remote sensing techniques of studying taiga after forest fires. Furiaev, V.V., [1986, p.147-159, rus] 41-3971
- Using spaceborne photography data in studying forests and swamps. Gorozhankina, S.M., [1986, p.169-189, rus] 41-3973
- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. [1986, 166p., rus] 41-4060
- Geocryological regionalization of the Far Eastern economic region. Shata, M.M., [1986, p.71, rus] 41-4066
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, [1984, 193p., rus] 41-4086

## Mapping (cont.)

- Hydroclimatic regionalization of West Siberia from space photographs. Gorozhankina, S.M., [1984, p.16-25, rus] **41-4087**
- Soil climate in southeastern West Siberia. Az'muka, T.I., et al, [1984, p.26-31, rus] **41-4088**
- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus] **41-4120**
- Fundamentals of avalanche science. Bozhinskii, A.N., et al, [1987, 280p., rus] **41-4129**
- Use of map parameters to examine cumulative impacts in Prudhoe Bay Oilfield. Walker, D.A., et al, [1986, p.149-160, eng] **41-4139**
- Observation of sea ice using the 36-GHz surface contour radar. Fedor, L.S., et al, [1987, p.393-402, eng] **41-4174**
- Origin and evolution of Goes Lake, Spitsbergen. Grzes, M.G., et al, [1986, p.122-124, 233-234, rus] **41-4355**
- Remote sensing in the Ross Ice Shelf region. Bentley, C.R., et al, [1987, p.20-29, eng] **41-4429**
- Mapping Amery Ice Shelf. Partington, K.C., et al, [1987, p.183-188, eng] **41-4455**
- Radar altimetry delineates ice shelf boundaries and elevations. Zwally, H.J., et al, [1987, p.229-235, eng] **41-4465**
- Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., [1986, 78p., rus] **41-4523**
- Studies of migration frost mounds with the use of multiband aerial photographs. Gromova, E.I., [1983, p.142-150, rus] **41-4612**
- Possibilities of the landscape-indication method for engineering-geological studies of northern West Siberia. Bondarik, G.K., et al, [1987, p.15-29, rus] **41-4621**
- Maps**
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] **41-571**
- Atlas of the Arctic. Treshnikov, A.F., ed, [1985, 204p., rus] **41-701**
- Radio-echo investigations of Ronne Ice Shelf. Crabtree, R.D., et al, [1986, p.37-41, eng] **41-735**
- Antarctic ice sheet topography and surface-bedrock relationships. McIntyre, N.F., [1986, p.124-128, eng] **41-753**
- Application of space imagery to geocryologic mapping. Nekrasov, I.A., et al, [1985, p.187-195, eng] **41-1445**
- Comments on the antarctic gravity anomaly map. Segawa, J., et al, [1986, p.19-22, eng] **41-1471**
- Supplying engineering and geological data on mass construction objects. Khalmé, N.M., et al, [1986, p.37-49, rus] **41-1537**
- Methods of compiling maps of the factors affecting avalanche formation in areas outside the USSR for the World Atlas of Snow and Ice Resources. Dziuba, V.V., [1986, p.81-86, rus] **41-1643**
- Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., [1986, 224p., rus] **41-1748**
- Comparison of glacier maps—a source of climatological information. Ostrem, G., et al, [1986, p.225-231, eng] **41-1881**
- Geocryological research. Ershov, E.D., ed, [1986, 224p., rus] **41-2080**
- Publication of map and monograph on geocryology of the USSR. Ershov, E.D., et al, [1986, p.212-217, rus] **41-2103**
- Beaufort Sea atlas. Mungall, C., [1986, p.10-11, eng] **41-2199**
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] **41-2289**
- Antarctic ice charts 1983-1984. [1985, 125p., eng] **41-2337**
- Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae—Leguminosae. Part 2. Family Leguminosae. Korobkov, A.A., et al, [1986, 188p., rus] **41-2361**
- Perennially frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation. Tong, B., et al, [1986, p.66-78, rus] **41-2541**
- Improving the map of spring-flood runoff layer of the Chukchi Peninsula rivers. Boiarintsev, E.L., [1986, p.8-17, rus] **41-2649**
- Methods of compiling general radar maps of polar regions. Bondina, T.V., et al, [1986, p.58-63, rus] **41-2717**
- Atlas of the polar regions. [1985, 66p., eng] **41-2884**
- Permafrost rocks of the Tsinkhai-Sizan plateau of Tibet and their formation conditions. Tong, B., et al, [1986, p.68-79, eng] **41-3017**
- Maps of technogenic thermokarst development potential. Parmuzin, S.I.U., et al, [1986, p.184-193, eng] **41-3198**
- Geographic modeling of evaporation from water-bodies of mountainous countries. Gvakharia, V.K., [1986, 114p., rus] **41-3366**
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] **41-3481**
- Map of distribution and discontinuity of permafrost in western Siberia. Fotiev, S.M., [1986, p.38-52, rus] **41-3485**
- Possibilities of landscape indication in engineering-geological surveys of southern Central Yakutia. Gravis, G.F., et al, [1986, p.85-96, rus] **41-3489**
- Methods of evaluating and mapping the susceptibility of cryogenic landscapes. Fedorov, A.N., et al, [1986, p.121-133, rus] **41-3493**
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, [1987, 166p., rus] **41-3649**
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, [1987, p.4-65, rus] **41-3650**
- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed, [1985, 160p., rus] **41-4118**
- Methodical and experimental bases of geothermy. Kropotkin, P.N., ed, [1983, 230p. (Pertinent p.79-84, 181-187), rus] **41-4614**
- Discussion on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al, [1987, p.120, rus] **41-4623**
- See also: Charts; Geological maps; Meteorological charts; Topographic maps
- Marginal ice zone**
- See: Ice edge
- Marine biology**
- Coastal ecology and the Arctic oil industry. Sendstad, E., [1986, p.87-96, eng] **41-347**
- JARE 25 wintering party activities, 1984-1985. Hirasawa, T., [1986, p.113-137, jpn] **41-980**
- Nutrient limitation of sea ice microalgae. Maestrini, S.Y., et al, [1986, p.969-982, eng] **41-1473**
- Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.35. [1985, 440p., eng] **41-1784**
- Benthonic foraminifera from Baffin I. fiord environments. Schafer, C.T., et al, [1986, p.232-239, eng] **41-1867**
- Life and living conditions of the Barents Sea benthos. Matishov, G.G., ed, [1986, 220p., rus] **41-1901**
- Energy-flow budgets in aquatic ecosystems. Petersen, G.H., [1984, p.621-633, eng] **41-2010**
- Effect of crude oil on tidal-flat ecosystem in Port Valdez, Alaska. Naidu, A.S., et al, [1978, p.97-104, eng] **41-2121**
- All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. [1986, 268p., rus] **41-2384**
- Recent trends in studying the ecology of Polar seas of the Arctic. Matishov, G.G., [1986, p.1-5, rus] **41-2385**
- Peculiarities of ecosystems distribution in the Barents Sea. Golikov, A.N., et al, [1986, p.7-8, rus] **41-2386**
- Environmental and photosynthetic relationships in antarctic sea ice algae. Palmisano, A.C., et al, [1987, p.299-306, eng] **41-3146**
- Environmental assessment of the Alaskan continental shelf, Vol.3: effects and contaminant baselines. [1980, 352p., eng] **41-3380**
- Krill overwintering strategy under fast ice in Lützow-Holm Bay. Kawaguchi, K., et al, [1986, p.67-85, eng] **41-3633**
- Antarctic ecosystem. Benninghoff, W.S., [1987, p.9-14, eng] **41-3739**
- Soviet-American expedition "Weddell-POLEX-81", review. Gordon, A.L., [1986, p.27-37, rus] **41-4184**
- Marine deposits**
- Glacial deposition including moraines, drumlins and eskers. Minion, R., comp, [1985, 98p., eng] **41-825**
- High latitude drilling in the ocean drilling program. Harding, B.W., et al, [1986, p.83-106, eng] **41-1092**
- Permafrost formation in littoral and sublittoral zones of northern Eurasia. Maslov, A.D., [1986, p.79-85, rus] **41-2539**
- Organic soils. Rubinshtein, A.I.A., [1986, 89p., rus] **41-2729**
- Regularities governing the salinity of frozen marine deposits. Dubikov, G.I., [1986, p.14-27, rus] **41-2815**
- Dislocations in frozen, ice-containing, Pleistocene deposits of northern western Siberia. Danilov, I.D., [1986, p.28-41, rus] **41-2816**
- Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program. Hodgins, D.O., et al, [1986, 195p., eng] **41-3030**
- Hibernia ice-scour model studies. Schoenthaler, L., [1986, p.118-121, eng] **41-3099**
- Estimating ice-scour frequency and risk to buried pipelines. Pilkington, R., [1986, p.213-220, eng] **41-3113**
- Palyngology as a method for dating iceberg scours. Mudie, P.J., [1986, p.233-239, eng] **41-3115**
- Preliminary simulation of the formation and infilling of sea ice gouges. Weeks, W.F., et al, [1986, p.259-268, eng] **41-3118**
- Contribution to the study of sediments in the Bransfield Strait region. Silva Martins, L.R., et al, [1987, p.127-146, port] **41-3156**
- Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed, [1986, 165p., rus] **41-3428**
- Dislocations and permafrost development in the Pleistocene deposits of northern USSR. Popov, A.I., [1986, p.146-153, rus] **41-3429**
- Phytoplankton in marine sediments of Frobisher Bay. Hsiao, S.I.C., [1987, p.245-251, eng] **41-3685**
- Shelf: the relief, sediments and their formation. Ionin, A.S., et al, [1987, 205p. (Pertinent p.53-80), rus] **41-3688**
- Processes of glacialine sedimentation. Dowdeswell, J.A., [1987, p.52-90, eng] **41-4132**
- Micropaleontology and sedimentology of Prudhoe Bay. McDougall, K., et al, [1986, 62p. + 14 plates, eng] **41-4600**
- See also: Sediments
- Marine geology**
- 1985 field studies, Beaufort and Chukchi Seas, conducted from the NOAA ship *Discoverer*. Miley, J.M., ed, [1986, 57p. + figs., eng] **41-831**
- Morphology and sediment processes and supply from Weddell Sea floor. Anderson, J.B., et al, [1986, p.121-129, eng] **41-1278**
- Quantitative study of slope instability in the Gulf of Alaska. Hampton, M.A., et al, [1978, p.2307-2318, eng] **41-2127**
- Permafrost formation in littoral and sublittoral zones of northern Eurasia. Maslov, A.D., [1986, p.79-85, rus] **41-2539**
- Reflection experiment on a floating ice platform. Hajnal, Z., et al, [1987, p.201-208, eng] **41-2948**
- Mat foundations for offshore structures in Arctic regions. Yokel, F.Y., et al, [1987, 146p., eng] **41-3029**
- Regional geology and seabed dynamics at the proposed iceberg scour (DIGS) experiment site. Josenhans, H.W., [1986, p.132-137, eng] **41-3102**
- Numerical model for iceberg grounding events. D'Apollonia, S.J., et al, [1986, p.221-232, eng] **41-3114**
- Design of a repetitive-mapping network for ice scour: east coast. Hodgson, G.J., [1986, p.287-292, eng] **41-3121**
- Canadian Conference on Marine Geotechnical Engineering, 3rd, 1986, vol.3. [1986, p.852-1036 (Vol.3), eng] **41-3168**
- Geotechnical engineering offshore, eastern Canada. Brown, J.D., [1986, p.852-878, eng] **41-3169**
- Iceberg scour mapping for the Canadian East Coast. Lewis, C.F.M., [1987, 45p. + maps, eng] **41-3225**
- Glacial and iceberg effects on morphology off Wilkes Land. Barnes, P.W., [1987, p.175-194, eng] **41-4545**
- Marine meteorology**
- Canadian inland seas. Martini, I.P., ed, [1986, 494p., eng] **41-2591**
- Climate overview of the Canadian inland sea. Maxwell, J.B., [1986, p.79-100, eng] **41-2592**
- Marine meteorological and oceanographic products of the OPC. Feit, D.M., [1986, 105p., eng] **41-4156**
- Marine transportation**
- Finnlines fleet for year-round transportation. [1986, p.45-47, eng] **41-91**
- Evolution and potential of the Arctic submarine. McLaren, A.S., [1985, p.448-453, eng] **41-226**
- Computerized simulation of fleet performance in the Arctic. Batsikh, I.U.M., et al, [1985, p.48-53, rus] **41-489**
- Guide to marine transportation information sources in Canada. Jobs, J.C., [1985, 308p., eng] **41-562**
- Arctic shipping. [1986, p.17-29, eng] **41-567**
- SHAREM cold weather experience. Oakes, J.R., [1986, p.149-161, eng] **41-929**
- Transportation of heavy modules to the Arctic. Kirkede, K.L., et al, [1986, p.1160-1168, eng] **41-1151**
- Research for commercial Arctic marine transportation. Seibold, F., [1985, p.28-35, eng] **41-1557**
- "NAV-ICE"—an integrated system for ice navigation. McAvoy, J.G., et al, [1986, p.457-466, eng] **41-1612**
- Development of arctic marine technology over the last ten years. Dick, R.A., [1986, p.519-536, eng] **41-1616**
- SS ACV icebreaking LNG/oil tanker for year round Arctic transportation. Murthy, T.K.S., [1986, p.563-576, eng] **41-1619**
- Rules for the classification and construction of sea-going ships. [1986, 680p., eng] **41-1682**
- International Polar Transportation Conference, 1986. [1986, 2 vols. (877p.), eng] **41-2020**
- Canada's Arctic marine transportation research programs. Brenckmann, M., [1986, p.1-18, eng] **41-2021**
- Polar class icebreakers. Rinehart, V., et al, [1986, p.19-40, eng] **41-2022**
- Updating the Canadian ice class rules. Grinstead, J., [1986, p.66-104, eng] **41-2024**
- Improving polar transportation of Canada. Jeffrey, N.E., et al, [1986, p.149-168, eng] **41-2026**
- Prospects of Arctic marine technology for the 1990's. Stubbs, J.T., et al, [1986, p.220-243, eng] **41-2029**
- Arctic *Ivik*—a new Arctic class II vessel for the Beaufort Sea. Armour, R., et al, [1986, p.244-256, eng] **41-2030**
- Design for a novel icebreaker assisting Arctic LNG vessels. Lindqvist, G., et al, [1986, p.257-278, eng] **41-2031**
- Transportation considerations in Arctic mining development. Giegerich, H., [1986, p.352-367, eng] **41-2035**
- Drilling rig transportation in the Canadian arctic islands. Baudais, D.J., et al, [1986, p.420-451, eng] **41-2038**
- Icebird*—a new generation of polar resupply vessel. Brune, E., [1986, p.512-522, eng] **41-2042**

- Operating and design of antarctic resupply vessels. Mercer, C.L., et al, [1986, p.531-547, eng] 41-2044
- Current ice road and structure design and construction procedures. Masterson, D.M., et al, [1986, p.602-648, eng] 41-2048
- Winter navigation of icebreaking *Lunni*-class tankers in the Baltic Sea. Tornblom, A., [1986, p.710-725, eng] 41-2053
- Experiences from bulk transports in the Arctic. Ekholm, S., [1986, p.726-733, eng] 41-2054
- Safe speed of ships in Arctic waters. Koehler, P.E., et al, [1986, p.734-746, eng] 41-2055
- M.V. *Arctic* in the Canadian High Arctic. Luce, M., et al, [1986, p.747-763, eng] 41-2056
- Winter marine transportation off Alaska. Brigham, L.W., [1986, p.805-819, eng] 41-2059
- Safe shipping routes in Canadian Arctic waters. MacPhee, S., et al, [1986, p.820-838, eng] 41-2060
- Advanced radar systems for support of Arctic marine operations. Mercer, J.B., et al, [1986, p.839-858, eng] 41-2061
- Merchant ship ice navigation studies in the Canadian Arctic. Perchanok, M.S., et al, [1986, p.859-877, eng] 41-2062
- Operation of German polar research and supply ship *Polarstern*. Müller, K., [1986, p.1523-1526, ger] 41-2195
- Possibilities for Arctic heavy transportation. Wärtsilä, K.L., [1986, 20p., eng] 41-2284
- Management of Arctic marine transportation: a Canadian perspective. McRae, D.M., [1986, p.350-359, eng] 41-2691
- Ocean development and management in the Arctic by USA and Canada. Vanderzwaag, D.L., et al, [1986, p.327-337, eng] 41-2724
- Jurisdiction and management of Arctic marine transportation. Westermeyer, W.E., et al, [1986, p.338-349, eng] 41-2725
- Marine transportation of liquefied gases. Kozyrev, V.K., [1986, 206p., rus] 41-2872
- Sevmorput* is launched. [1986, p.24-25, rus] 41-3203
- Ship for scientific expeditions to Antarctica. Seppanen, E., [1987, p.244-246, rus] 41-4148
- Marion Island**
- Bacterial populations in soils of a subantarctic island. French, D.D., et al, [1986, p.75-82, eng] 41-501
- Mars (planet)**
- Quaternary research (Selected papers of the 11th INQUA Congress). Kartashov, I.P., ed, [1986, 200p., rus] 41-549
- Mars: periglacial and glacial relief forms. Lucchitta, B.K., [1986, p.183-193, rus] 41-550
- Ice and snow of the north polar caps of Mars and Earth. Foster, J., et al, [1986, p.223-235, eng] 41-959
- Martian polar caps: a review. Masson, P.L., [1985, p.521-534, eng] 41-1722
- Mars: long term changes in the state and distribution of H<sub>2</sub>O. Fanale, F.P., et al, [1985, p.535-564, eng] 41-1723
- Subsurface ice and permafrost on Mars. Anderson, D.M., [1985, p.565-581, eng] 41-1724
- Geomorphologic evidence for ground ice on Mars. Lucchitta, B.K., [1985, p.583-604, eng] 41-1725
- Hydro lithosphere and subsurface ice on Mars. Battistini, R., [1985, p.607-617, eng] 41-1726
- Thermokarst features on Mars. Costard, F., [1986, p.123-131, fre] 41-4423
- Signs of "semiarid" pediplanation on Mars. Polosukhin, V.P., [1987, p.79-85, rus] 41-4497
- Marshes**
- See: Swamps
- Mass balance**
- Flow near an ice divide: analysis problems and data requirements. Waddington, E.D., et al, [1986, p.171-174, eng] 41-763
- Mass balance and trends in glacier changes in the USSR. Akbarov, A.A., et al, [1986, p.43-599, rus] 41-775
- Combined ice and water balance investigations at the Vernagtferner Glacier. Reinwarth, O., [1986, p.116-120, 233-236, eng] 41-1065
- Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., [1983, 274p., eng] 41-3073
- Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274
- Some aspects of the flow of the Ronne Ice Shelf. Doake, C.S.M., [1987, p.75-98, eng] 41-3275
- Ice-shelf backpressure: form drag versus dynamic drag. MacAyeal, D.R., [1987, p.141-160, eng] 41-3278
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al, [1987, p.249-285, eng] 41-3284
- Mass balance of two high Arctic Plateau ice caps. Bradley, R.S., et al, [1987, p.123-128, eng] 41-3605
- Riser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al, [1986, p.23-31, eng] 41-4094
- Riser-Larsen oxygen isotopes and accumulation rates. Orheim, O., et al, [1986, p.33-47, eng] 41-4095
- Mass balance of the Arctic Ocean. Rudels, B., [1987, 53p., eng] 41-4599
- See also: Glacier mass balance
- Mass flow**
- Glacio-geophysical implications of NNSS positioning at Showa Station. Shibuya, K., [1986, p.327-346, eng] 41-2212
- Mass transfer**
- International Heat Transfer Conference, 6th, Toronto. [1978, Vols. 1, 2 and 3, eng] 41-463
- Heat and mass transfer in soil. Shapiro, H.N., et al, [1978, p.19-24, eng] 41-465
- Enthalpy methods used in the solution of Stefan problems. Voller, V.R., et al, [1985, p.245-275, eng] 41-658
- Ices in planetary rings. Smoluchowski, R., [1985, p.681-689, eng] 41-1730
- Periglacial processes, Banks Island, Canada. French, H.M., [1986, p.167-174, eng] 41-1875
- Surface heat and mass balance. Maykut, G.A., [1986, p.395-463, eng] 41-2991
- Mechanisms of mass movement in periglacial environments. Harris, C., [1987, p.531-559, eng] 41-3045
- Experimental investigations of heat-mass transfer coefficients in macroporous media. Mukhetdinov, N.A., [1986, p.119-127, rus] 41-3455
- Investigation of moisture movements and stresses in frozen soils. Williams, P.J., et al, [1982, 134p. + append., eng] 41-3500
- Modeling of processes in landscape-geochemical systems. Sysuev, V.V., [1986, 301p., rus] 41-3512
- Stability of a plane crystallization front moving at constant velocity. Badratina, L.G., [1983, p.388-394, eng] 41-4613
- Materials**
- Physical modeling in ice engineering. Ettema, R., [1986, p.57-65, eng] 41-1304
- Mathematical models**
- Construction of mineral-raw materials bases in northern mountains. Pakhomov, V.P., et al, [1985, p.39-45, rus] 41-208
- Stresses and strains originating in structures near cracks. Terekhova, T.A., [1985, p.55-57, rus] 41-303
- Mathematical modelling. Processes in complex economic and ecological systems. Samarskiĭ, A.A., ed, [1986, 295p., rus] 41-547
- Modeling tundra populations and communities. Baĭbikov, E.V., et al, [1986, p.207-219, rus] 41-548
- Mathematical modeling of thermal regime of a building in annual cycle, for fuel economy in heating-cooling of premises. Mskhalia, Zh.I., [1986, p.86-89, rus] 41-905
- Models of the Filchner-Ronne Ice Shelf thickness distributions. Lange, M.A., et al, [1986, p.10-457-10-462, eng] 41-1022
- Mathematical models of well drilling processes in permafrost. Bugaev, V.G., [1978, p.69-73, rus] 41-1324
- Some modeling problems related to the theory of nales. Dement'eva, O.V., [1982, p.162-165, rus] 41-1443
- Photostimulated ice-forming activity centers in silver iodide aerosols. Olefinik, R.V., [1986, p.93-97, rus] 41-1453
- Sea ice and the antarctic winter atmospheric circulation. Mitchell, J.F.B., et al, [1986, p.953-969, eng] 41-1474
- Subsurface heating and melting of snow and ice. Krass, M.S., et al, [1986, p.27-38, rus] 41-1634
- Model of Pleistocene glaciation of the system "glaciers-ocean-troposphere-aesthenosphere". Karachenov, A.T., [1986, p.38-45, rus] 41-1635
- Mathematical model and forecasts of thermokarst evolution. Grigorian, S.S., et al, [1986, p.45-49, rus] 41-1636
- Modeling the formation and melting of snow cover. Motovilov, I.U.G., et al, [1986, p.50-56, rus] 41-1637
- Mathematical modeling for determining avalanche spread boundaries. Volodicheva, N.A., et al, [1986, p.78-81, rus] 41-1642
- Inverse Stefan problem in casting multicomponent alloys. Rutner, I.A.F., [1986, p.1479-1483, eng] 41-1852
- Numerical simulation of the artificial precipitation zone induced by seeding stratiform clouds with nucleating agents. Khvorost'ianov, V.I., et al, [1986, p.63-76, rus] 41-1902
- Modeling high-velocity winds and low air temperature over seas. Koshinskii, S.D., et al, [1986, p.90-107, rus] 41-1972
- Convective heat- and mass transfer between artificial ice and the atmosphere. Likhtenshtein, E.L., [1986, p.10-16, rus] 41-2147
- Process of hard snow formation on East Siberian roads. Maevskii, A.A., [1986, p.87-92, rus] 41-2160
- Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band. Kalzer, V.I.U., et al, [1986, p.29-42, eng] 41-2207
- Bulk transfer coefficients for heat and momentum over leads and polynyas. Andreas, E.L., et al, [1986, p.1875-1883, eng] 41-2220
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskii, M.I.A., et al, [1986, 133p., rus] 41-2253
- Univariate single-phase Stefan problem of movement in liquid phase. Kulagina, N.A., [1985, p.36-49, rus] 41-2350
- Self-simulating multivariate Stefan problem. Shmarev, S.I., [1986, p.126-146, rus] 41-2351
- All-Union tutorial seminar on mathematical modeling in science and technology. Summaries. [1986, 333p., rus] 41-2381
- Heat and mass transfer during crystal growth from water solutions. Brallovskaja, V.A., et al, [1986, p.54-55, rus] 41-2382
- Designing routes for complicated geological and climatic conditions in plains. Skutin, A.I., [1984, p.66-74, rus] 41-2455
- Numerical simulation of orographic snowfall. Cotton, W.R., et al, [1986, p.1658-1680, eng] 41-2500
- Energy transfer in soil with nonequilibrium phase transformation. Danielian, I.U.S., et al, [1986, p.156-161, rus] 41-2558
- Automated highway design. Fedotov, G.A., [1986, 317p., rus] 41-2861
- Elements of a computational theory for glaciers. Yakowitz, S., et al, [1986, p.132-150, eng] 41-2896
- Physico-chemical processes of mining. Mathematical models of leaching ores and thawing frozen rocks. Ignatov, A.A., [1986, 97p., rus] 41-3015
- Bottom topography effect on ice flow, barotropic flow and baroclinic flow. Häkkinen, S., [1987, p.3807-3820, eng] 41-3062
- Comment on "Atmospheric boundary layer modification in the marginal ice zone" by T.J. Bennett, Jr. and K. Hunkins. Andreas, E.L., [1987, p.3963-3969, eng] 41-3064
- Consolidation equations of Biot-Florian for three-phase soils. Gorelik, L.V., et al, [1985, p.56-62, eng] 41-3128
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al, [1987, 272p., rus] 41-3145
- Dynamics of ice-rock barriers under conditions of freezing of filtering rocks. Chugunov, V.A., et al, [1987, p.981-986, eng] 41-3242
- Probabilities of ice, wind and temperature loads on electrical transmission lines. Gartsman, L.B., [1987, 200p., rus] 41-3245
- Results of modeling high latitude climates. Nagurnyi, A.P., [1986, p.21-32, eng] 41-3263
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270
- Model for flow avalanches. Hutter, K., et al, [1986, p.87-112, eng] 41-3300
- Modeling turbogear assemblies of ice-navigating ships. Basalygin, G.M., [1986, p.39-48, rus] 41-3389
- Modeling frost penetration and frost heave. Golli, O.R., [1986, p.53-61, rus] 41-3446
- Experimental investigations of heat-mass transfer coefficients in macroporous media. Mukhetdinov, N.A., [1986, p.119-127, rus] 41-3455
- Modeling of processes in landscape-geochemical systems. Sysuev, V.V., [1986, 301p., rus] 41-3512
- Using a model of capillary porous body for calculating water seepage into soil. Golitsina, E.F., et al, [1986, p.108-116, rus] 41-3589
- Problems of cloud physics. Voloshchuk, N.I., ed, [1986, 249p., rus] 41-3669
- Numerical simulation of the evolution of seeded supercooled stratiform clouds. Bakhanov, V.P., et al, [1986, p.26-41, rus] 41-3670
- Multivariate regression analysis of the process of frozen peat dehydration. Aleksandrov, B.M., [1986, p.15-19, rus] 41-3766
- Calculating frost penetration into rocks of a cylindrical cavity. Dugartysrenov, A.V., et al, [1986, p.21-24, rus] 41-3770
- Natural associations of the Arctic and their protection. Korotkevich, E.S., ed, [1986, 120p., rus] 41-3860
- Solution of the self-simulating problem of heat and moisture transfer during freezing of disperse soils. Anitskii, P.A., [1987, p.1338-1344, eng] 41-4163
- Cooling of a salt solution. Entov, V.M., et al, [1987, p.1344-1347, eng] 41-4164
- Modeling ice cover evolution and ice redistribution. Appel, I.L., et al, [1986, p.71-77, rus] 41-4198
- Flow of granular material down an inclined plane. Flow avalanche model pt. 2: numerical results. Hutter, K., et al, [1987, p.239-261, eng] 41-4205
- Diagnostic ice-ocean model. Hibler, W.D., III, et al, [1987, p.987-1015, eng] 41-4208
- Influence of katabatic wind on snow and ice ablation. Ohata, T., [1986, p.25-29, 144-147, rus] 41-4335
- Dynamics and thermal regime of glaciers. Shumskii, P.A., et al, [1986, p.34-39, 152-157, rus] 41-4337
- Modeling runoff from Vernagtferner, Austria. Escher-Vetter, H., et al, [1986, p.65-69, 178-182, rus] 41-4342
- Calculating runoff hydrograph for the Marukh mountain-glacier basin, Caucasus. Balaeva, V.A., et al, [1986, p.69-74, 182-186, rus] 41-4343
- Diagnostics, statistical analysis and classification of instabilities in glacier dynamics. Rototsev, K.P., [1986, p.92-96, 205-209, rus] 41-4348
- Modeling glacier surges and climatically induced fluctuations. Mazo, V.B., et al, [1986, p.97-102, 210-214, rus] 41-4349
- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., [1986, p.122-167, rus] 41-4502
- Practical suggestions for calculating soil temperature regime (current awareness material). Fel'dman, G.M., [1985, 69p., rus] 41-4611



**Mathematical models (cont.)**

See also: Computerized simulation

**Meadow soils**

- Improving thermal regime of meadow soils. Strel'tsova, V.S., et al, [1985, p.14-26, rus] 41-255
- Oil spill impacts on meadow soils. Oderusova, T.G., [1985, p.27-31, rus] 41-256
- Seasonal variations in temperatures of subalpine soils. Razumov, V.V., [1985, p.90-102, rus] 41-848
- Meadow-chorozem cryogenic soils of the Buryat SSR. Kulikov, A.I., et al, [1986, 137p., rus] 41-1045
- Seasonal dynamics of plant communities in southern Taymyr tundras. Zanolka, L.L., [1986, p.135-150, rus] 41-1338
- Productivity of natural meadows in the upper Angara River delta. Kas'ianova, L.N., et al, [1986, p.78-83, rus] 41-1404
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, [1984, 193p., rus] 41-4086
- Thermal properties of cryogenic meadow-chorozem soils. Kulikov, A.I., [1984, p.126-130, rus] 41-4090
- Problems of origin and geography of soils. Liverovskii, I.U.A., [1987, 248p., rus] 41-4555

**Meadows**

- Floristic findings in Penkigney Bay, Chukotskiy Peninsula. Sekretreva, N.A., [1986, p.677-683, rus] 41-2563
- Combined use of vegetational resources in the north European USSR. Chertovskoi, V.G., [1985, p.26-31, rus] 41-3434

**Measurement**

- Pb-210 measurement of snow accumulation at Mizuho Station. Masuda, N., et al, [1986, p.159-165, eng] 41-1472
- Borehole closure at Mizuho Station. Kawada, K., et al, [1986, p.66-73, eng] 41-3659
- Improved conductivity method for the measurement of frost hardness. Zhang, M.I.N., et al, [1987, p.710-715, eng] 41-3778
- Elaboration of two methods to investigate unfrozen water movement in a snow-soil environment. Stein, J., [1987, 310p., eng] 41-3798
- See also specific types of measurement

**Measuring instruments**

- Hydrologic instrumentation facilities. Wagner, C.R., [1986, p.209-218, eng] 41-538
- Snow physics, avalanches, mudflows. Bolov, V.R., ed, [1985, 108p., rus] 41-836
- Picovoltmeters used in low-temperature research. Krasnopolin, I.A., [1986, p.1427-1431, eng] 41-994
- Photo-control tie of the SMP-32 to the MSU-S data and some reflection spectra characteristics of natural objects. Dosov, V.N., et al, [1985, p.57-66, rus] 41-1040
- "LAGO-Katabatic" programme. André, J.C., et al, [1986, p.17-18, eng] 41-1074
- Physical methods of studying material used in railroad technology. Vereshchagin, I.K., ed, [1982, 135p., rus] 41-1273
- Comparative specification of engineering thermometers for low temperatures. Tian, L.S., et al, [1986, p.259-262, eng] 41-1407
- Frost test instrument, DM-10. Xie, Y., et al, [1986, p.319-324, ch] 41-1439
- Ice thickness inductor probe. Warren, H.B., Jr., et al, [1983, 10 col., eng] 41-1675
- Ice borehole gas sampler for isotopic dating. Zemstov, A.A., et al, [1984, p.72-78, rus] 41-2355
- New technique to gauge sea ice. Johnstone, B., [1987, p.653, eng] 41-2737
- Automated navigational aids for icebreaking cargo ships. Koshevoi, A.A., et al, [1987, p.20-22, rus] 41-2785
- Errors of slaved gyrocompasses when navigating in high latitudes. Chichinadze, M.V., [1987, p.34-35, rus] 41-2786

- Thickness and temperature of permafrost in Kular Range. Sheshin, I.U.B., et al, [1986, p.47-50, rus] 41-2818
- 45 m mast for boundary layer meteorological research, Ekström Ice Shelf. Belitz, H.-J., et al, [1987, p.5-10, eng] 41-2844

- Determining heat conductivity coefficients of coarse grained materials used in embankment construction. Gorokhov, E.N., [1985, p.105-110, rus] 41-3130

- Thermal device for aircraft measurement of the solid water content of clouds. King, W.D., et al, [1986, p.356-362, eng] 41-3220

- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed, [1986, 192p., rus] 41-3513

- Step frequency radar for the measurement of sea ice thickness. Okamoto, K., et al, [1986, p.56-65, eng] 41-3658

- Three dimensionally scanning Doppler radar. Fujiyoshi, Y., et al, [1986, p.133-137, jpn] 41-3886

- Experience in studying thermal properties of ground. Zaitsev, V.S., [1986, p.115-118, rus] 41-4466

- Methodical and experimental bases of geothermy. Kropotkin, P.N., ed, [1983, 230p. (Pertinent p.79-84, 181-187), rus] 41-4614

See also specific instruments

**Mechanical ice prevention**

See: Ice removal

**Mechanical properties**

- Freeze thaw resistance of silica-fume concrete. Malhotra, V.M., [1986, p.1065-1094, eng] 41-1155
- Ship motion in waterways clogged with broken ice. Bratanov, T., et al, [1986, p.503-571, eng] 41-1615
- Low-temperature mechanical properties of asphalt concrete. Kallas, B.F., [1982, 53p., eng] 41-2136
- Ground freezing '85—a summary. Baker, T.H.W., et al, [1987, p.301-306, eng] 41-3039
- See also: Avalanche mechanics; Ice mechanics; Rock mechanics; Snow mechanics; Soil mechanics

**Mechanical tests**

- Determination of pore ice stresses in frozen soils. Yousef, H., [1986, p.262-282, eng] 41-1101
- Mechanical properties and behaviour of frozen soils. Yousef, H., [1986, p.299-322, eng] 41-1103

- Assessment of a small snowmobile for long-distance unsupported travel. Oszewski, R.J., et al, [1987, p.597-601, eng] 41-3859

**Meetings**

- Reports of several international and domestic symposia. Kurida, T., et al, [1986, p.93-112, jpn] 41-443
- Symposium on Glacier Mapping and Surveying, Reykjavik, 1985. [1986, 216p., eng] 41-727
- Australia, Britain, and Antarctica. Millar, T.B., ed, [1986, 111p., eng] 41-2597
- Dynamics of the West Antarctic Ice Sheet. Van der Veen, C.J., ed, [1987, 368p., eng] 41-3271
- Report of the third Chinese conference on permafrost. Péwé, T.L., [1986, p.89-95, eng] 41-3529
- Proceedings of the Eighth Symposium on Polar Meteorology and Glaciology. Kawaguchi, S., ed, [1986, 113p., eng] 41-3653
- Climate of Antarctica. Papers presented at the All-Union Symposium on the Study of the Climate of Antarctica. Dolgin, I.M., ed, [1986, 213p., eng] 41-3948
- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.1. [1986, 166p., rus] 41-3982
- Proceedings of the Second Symposium on Remote Sensing in Glaciology. [1987, 264p., eng] 41-4425
- Discussion on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al, [1987, p.120, rus] 41-4623

**Melting**

- Analysis of melting around a moving heat source. Moallemi, M.K., et al, [1986, p.1271-1282, eng] 41-394
- Thermodynamic theories of freezing and melting potentials. Rastogi, R.P., et al, [1986, p.179-185, eng] 41-530
- Outward melting in a cylindrical annulus. Ho, C.J., et al, [1986, p.240-245, eng] 41-850
- Moving boundary problem. Benard, C., et al, [1986, p.1669-1681, eng] 41-2065
- Latent heat thermal energy storage. Saito, A., et al, [1986, p.2946-2952, eng] 41-2109
- Self-simulating multivariate Stefan problem. Shmarev, S.I., [1986, p.126-146, rus] 41-2351
- Heat transfer, 1986; proceedings. [1986, 6 vols. + 1 vol. of abstracts, eng] 41-3288
- Effects of density change and subcooling on the melting of a solid in a rectangular enclosure. Kassinos, A., et al, [1986, p.1787-1792, eng] 41-3296
- Prediction and measurement of melting heat transfer to an unfixed phase change material heated in a horizontal concentric annulus. Betzel, T., et al, [1986, p.1793-1798, eng] 41-3297
- See also: Artificial melting; Defrosting; Glacier melting; Ice melting; Snow melting

**Melting points**

- Effects of radiation on the melting of a semi-transparent, semi-infinite medium. Cho, C., et al, [1978, p.373-378, eng] 41-470
- Direct contact melting heat transfer on a heated surface. Saito, A., et al, [1986, p.1805-1810, eng] 41-3299
- Melting process within spherical enclosures. Roy, S.K., et al, [1987, p.460-462, eng] 41-3757

- Melting temperature of ice at positive and negative pressures. Henderson, S.J., et al, [1987, p.3069-3072, eng] 41-4126

**Meltwater**

- Biological accumulation and monitoring of chemical wastes in arctic waters. Perkins, E.J., [1986, p.1-11, eng] 41-340

- Snow meltwater impurities from sewage effluent. Zapf-Gilje, R., et al, [1986, p.151-156, eng] 41-351

- Glaciological investigations in 1984 at Tasersiaq and Qapiarfup sernia, West Greenland. Olesen, O.B., [1985, p.104-107, eng] 41-575

- Hydrology and chemistry of glacial meltwater and snowmelt, Norway. Amos, J., [1985, p.52-60, eng] 41-584

- Moraine ridge deposition on Boverfreen glacial foreland. Gallagher, J., [1985, p.61-73, eng] 41-585

- Chemical effects of sea water on sea ice melt water. Anderson, L.G., et al, [1985, p.90-96, eng] 41-592

- Sources of organic nitrogen, phosphorus and carbon in antarctic streams. Downes, M.T., et al, [1986, p.215-225, eng] 41-613

Accuracy of pH determination in glacial meltwaters.

Metcalf, R.C., [1984, p.41-51, eng] 41-624

Experimental determination of water movement in the Firn layers of Abramov Glacier. Glazyrin, G.E., et al, [1986, p.110-117, rus] 41-781

Influence of moraines on turbidity of glacial waters. Tikhonovskaya, A.A., et al, [1986, p.123-128, rus] 41-783

Meltwater streams as the cause of soil erosion. Mkrtchian, G.P., [1986, p.108-114, rus] 41-814

Mass balance and sliding velocity of the Puget lobe, Cordilleran ice sheet. Booth, D.B., [1986, p.269-280, eng] 41-1189

All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings. [1985, 126p., rus] 41-1362

Stream-water chemistry during snowmelt. Hendershot, W.H., et al, [1985, p.58-68, eng] 41-1485

Antarctic stream ecosystems: variability in environmental properties and algal community structure. Howard-Williams, C., et al, [1986, p.511-544, eng] 41-1558

Salt transfer processes in cryogenic soils. Panin, P.S., et al, [1986, p.245-250, rus] 41-1745

Nucleation mechanism of ice crystals under electrical effect. Shichiri, T., et al, [1986, p.502-508, eng] 41-2105

Calculating runoff formation in catchment areas from remote sensing data. Kulikov, I.U.N., et al, [1986, p.30-36, rus] 41-2734

Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., [1983, 274p., eng] 41-3073

Changes in chemical composition of meltwater in areas of intensive human activities. Dvornikova, L.L., et al, [1986, p.60-68, rus] 41-3210

Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] 41-3286

Subglacial drainage for an ice sheet resting upon a layered deformable bed. Shoemaker, E.M., et al, [1987, p.4935-4946, eng] 41-3342

Channel processes, changes, and sediments in a proglacial braided river. Ashworth, P.J., et al, [1986, p.361-371, eng] 41-3566

Modeling the process of water yield from snow cover. Pankratova, E.I., et al, [1986, p.37-46, rus] 41-3586

Numerical evaluation of the effect of hydrometeorological factors on the formation of water reserves in soil. Zaretskii, I.U.A., et al, [1986, p.46-56, rus] 41-3587

Using a model of capillary porous body for calculating water seepage into soil. Golitsina, E.F., et al, [1986, p.108-116, rus] 41-3589

Snow algal bloom and habitat at Showa Station. Ishikawa, S., et al, [1986, p.191-197, eng] 41-3635

Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] 41-3742

Nitrogen in two contrasting antarctic bryophyte communities. Christie, P., [1987, p.73-93, eng] 41-3795

Cooling of water and air by melting ice. Fujiyoshi, Y., et al, [1987, p.97-102, eng] 41-3833

Oxygen isotope ratio in meltwater of the ice cap, Jakobshavn. Reeh, N., et al, [1986, 34p., dan] 41-3938

Breakup of small rivers in the Subarctic. Woo, M.-K., et al, [1987, p.784-795, eng] 41-4081

Forest hydrology and watershed management. Swanson, R.H., ed, [1987, 625p., eng] 41-4313

Dynamics and mass balance of ions in meltwater and runoff in boreal forest. Jones, H.G., et al, [1987, p.19-31, eng] 41-4314

Sources of acidity during snowmelt at a forested site in the west-central Adirondack Mountains, New York. Peters, N.E., et al, [1987, p.99-108, eng] 41-4315

Water release from a forested snowpack during rainfall. Kattelmann, R., [1987, p.265-272, eng] 41-4316

Meltwater seepage on temperate and cold glaciers. Bazhev, A.B., [1986, p.50-55, 165-170, rus] 41-4339

Runoff in basins with variable extent of glaciation. Oerter, H., et al, [1986, p.59-64, 173-178, rus] 41-4341

Nomographs for meltwater determination. Ambach, W., et al, [1986, p.181-189, eng] 41-4357

Nomographs for the determination of meltwater from snow and ice surfaces. Ambach, W., [1986, p.7-15, eng] 41-4358

Preferential elution of snowfall in Scottish highlands. Tranter, M., et al, [1986, p.517-525, eng] 41-4533

Outline of the studies on the system of snow-melt of the Joetsu-Shinkansen. Nakamata, S., [1985, p.1-6, jpn] 41-4584

Landslide disaster in Niigata Prefecture, 1985. [1985, p.73-92, jpn] 41-4585

Influence of the melted snow water on landslides. Yoshida, S., [1985, p.91-97, jpn] 41-4591

See also: Snowmelt

**Merchant marine**

- Determining the economic effectiveness of investments in the Arctic Fleet. Dofban, V.A., [1985, p.6-10, rus] 41-488



**Metal ice friction**

- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed. [1984, 24p., rus] 41-4503  
 Methods of studying contact interactions of materials with ice and snow. Igoshin, V.A., et al. [1984, p.3-7, rus] 41-4504

- Problem of diminishing the force of icebreaker friction against ice. Maksutov, D.D., [1984, p.15-16, rus] 41-4508

- Physical properties of liquid layers between ice and adfrozen material. Fedoseeva, V.I., [1984, p.19-24, rus] 41-4510

**Metal snow friction**

- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed. [1984, 24p., rus] 41-4503

**Metals**

- Atmospheric toxic metals in snow and ice. Boutron, C.F., [1986, p.467-505, eng] 41-672

- Picovoltmeters used in low-temperature research. Krasnopolin, I.A., [1986, p.1427-1431, eng] 41-994

- Trace metals in the snow of northern Sweden. Ross, H.B., et al. [1986, p.27-43, eng] 41-1260

- Development of prefabricated metal buildings for cold environment. Sakai, M., et al. [1985, p.20-29, eng] 41-1572

- Calculating frost resistance of structural elements. Kuz'min, V.R., [1986, 145p., rus] 41-1985

- Retention and release of metals by soils—evaluation of several models. Amacher, M.C., et al. [1986, p.131-154, eng] 41-2138

- Trace elements in the Greenland Ice Cap melt zone. Chevallier, P., et al. [1987, p.E649-E656, eng] 41-2728

- Gas-thermal methods of rebuilding equipment for the North. Tiunin, V.D., et al. [1985, p.116-119, rus] 41-2853

- Estimation of industrial emission into the atmosphere. Boiarkina, A.P., et al. [1987, p.14-23, rus] 41-3945

- Content of mercury in the snow cover of Pribyal'ye. Poslovina, A.L., et al. [1987, p.56-60, rus] 41-3946

- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed. [1986, 81p., rus] 41-4546

- Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams. Mironov, V.P., et al. [1986, p.3-7, rus] 41-4547

- See also: Gold; Steels

**Metamorphism (snow)**

- Glaciology of mountainous regions. Suslov, V.F., ed. [1986, 136p., rus] 41-769

- Composition and structure of the special data bank "Snow cover in mountains". Tsarev, B.K., [1986, p.3-10, rus] 41-770

- Long period regime of a drifted snow field. Pertsiger, F.I., [1986, p.117-123, rus] 41-782

- Classification of seasonal snow cover crystals. Colbeck, S.C., [1986, p.595-705, eng] 41-1028

- Process of hard snow formation on East Siberian roads. Maevskii, A.A., [1986, p.87-92, rus] 41-2160

**Meteorological charts**

- Travelling in antarctic weather. Junqueira Villela, R., [1986, p.42-55, por] 41-587

- Simulation of polar lows in the Norwegian Sea. Grönås, S., [1986, p.201-220, eng] 41-1806

- Modeling high-velocity winds and low air temperature over seas. Koshinskii, S.D., et al. [1986, p.90-107, rus] 41-1972

- Climatic atlas. Map series 2—Precipitation. [1986, 2p. + 48p. of maps, eng] 41-4521

- Climatic atlas, including freezing precipitation. [1987, 3p. + 108p. of maps, eng] 41-4522

**Meteorological data**

- Aircraft observations of large scale cloud systems. Cohen, I.D., [1982, p.203-206, eng] 41-116

- Travelling in antarctic weather. Junqueira Villela, R., [1986, p.42-55, por] 41-587

- Modeling high-velocity winds and low air temperature over seas. Koshinskii, S.D., et al. [1986, p.90-107, rus] 41-1972

- Weather extremes. Schmidli, R.J., [1981, 15p., eng] 41-2529

- Supply of snow in the Eastern Highlands of Scotland: 1954-5 to 1983-4. Davison, R.W., [1987, p.42-50, eng] 41-3147

- Wind studies center in the Croix de Chamrousse (Isère) mountain environment. Perroud, P., et al. [1986, p.51-54, fre] 41-3357

- Meteorological data from Langtang Valley, Nepal Himalayas. Takahashi, S., et al. [1987, p.121-128, eng] 41-3924

- By radio from Antarctica. [1986, p.92-95, rus] 41-1192

- Casey snow runway meteorological records, 1984. Russell-Head, D.S., et al. [1987, 98p., eng] 41-4528

**Meteorological factors**

- Impact of meteorological conditions on mass balance of glaciers. Ohata, T., et al. [1986, p.63-67, 188-191, eng] 41-1057

- New method of measuring the snow-surface temperature. Andreas, E.L., [1986, p.139-156, eng] 41-1285

- Calculation of optimal work time for polar conditions. Musatova, M.M., [1986, p.50-51, rus] 41-1890

- Possibility of forecasting the intensity of ice accretion. Volevka, V.A., et al. [1986, p.58-67, rus] 41-2638

- Probabilities of ice, wind and temperature loads on electrical transmission lines. Gartsmann, L.B., [1987, 200p., rus] 41-3245

- Skiing accidents due to meteorological conditions. Rey, L., [1987, p.15-24, fre] 41-3418

- Interaction between subtropical high and polar ice in Northern Hemisphere. Fang, Z., [1987, p.330-335, eng] 41-4487

**Meteorological instruments**

- Computer interfacing of meteorological sensors in severe weather. Rancourt, K., et al. [1985, p.205-211, eng] 41-1496

- Surface sampling of a snowstorm by a 2D-C probe with and without aspiration. Holroyd, E.W., III, [1986, p.755-758, eng] 41-4544

- See also specific instruments

**Meteorology**

- Satellites for collecting information from automatic hydrometeorological stations. Denisov, S.I., et al. [1984, p.85-88, rus] 41-559

- Outer Continental Shelf Environmental Assessment Program: Final reports of principal investigators, Vol.39. [1986, 360p., eng] 41-1785

- Ice Island underfoot. Chilingarov, A., et al. [1986, 175p., rus] 41-3250

- Proceedings of the Eighth Symposium on Polar Meteorology and Glaciology. Kawaguchi, S., ed. [1986, 113p., eng] 41-3653

- Climate of Antarctica. Papers presented at the All-Union Symposium on the Study of the Climate of Antarctica. Dolgin, I.M., ed. [1986, 213p., eng] 41-3948

- See also: Atmospheric physics; Glacial meteorology; Marine meteorology; Synoptic meteorology; Weather

**Microanalysis**

- Snow and avalanche measuring techniques. Neubauer, F., [1984, p.175-179, ger] 41-712

- Microparticles in Dome C ice cores. Gaudichet, A., et al. [1986, p.250-261, eng] 41-1755

**Microbiology**

- Microbial aspects of the Inuvik sewage lagoon. Henry, J.G., et al. [1986, p.117-128, eng] 41-349

- Lipids of the antarctic sea ice diatom *Nitzschia cylindrus*. Nichols, P.D., et al. [1986, p.1649-1653, eng] 41-614

- Benthic microalgal standing stock distribution patterns at McMurdo Sound. Dayton, P.V., et al. [1986, p.207-213, eng] 41-1015

- Organism losses during sea ice melting. Garrison, D.L., et al. [1986, p.237-239, eng] 41-1016

- Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al. [1984, p.159-165, eng] 41-1280

- Photosynthetic adaptation of sea ice microalgae in Hudson Bay. Legendre, L., et al. [1986, p.321-326, eng] 41-1554

- Microalgal carbon assimilation in sea ice of East Antarctica. McConville, M.J., et al. [1985, p.135-141, eng] 41-1629

- All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. [1986, 268p., rus] 41-2384

- Recent trends in studying the ecology of Polar seas of the Arctic. Matishov, G.G., [1986, p.1-5, rus] 41-2385

- Peculiarities of ecosystems distribution in the Barents Sea. Golikov, A.N., et al. [1986, p.7-8, rus] 41-2386

- Bacterial plankton in the ecosystems of pelagic zones of the Barents and White seas. Teplinskaya, N.G., [1986, p.18-20, rus] 41-2388

- Nitrogen-fixing pseudomonads from Arctic plant roots. Lifshitz, R., et al. [1986, p.251-255, eng] 41-2493

- Ecology of sea ice microbial communities of McMurdo Sound. Kottmeier, S.T., et al. [1985, p.128-130, eng] 41-2956

- Photoadaptive strategies in a natural population of *Phaeocystis pouchetii* in McMurdo Sound. Palmisano, A.C., et al. [1985, p.133-134, eng] 41-2957

- Microheterotrophs in the ice-edge zone: an AMERIEZ study. Garrison, D.L., et al. [1985, p.136-137, eng] 41-2958

- Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover. McGrath Grossi, S., et al. [1987, p.153-164, eng] 41-3131

- Bacterial production in annual sea ice in McMurdo Sound. Kottmeier, S.T., et al. [1987, p.175-186, eng] 41-3133

- Environmental and photosynthetic relationships in antarctic sea ice algae. Palmisano, A.C., et al. [1987, p.299-306, eng] 41-3146

- Ice diatom florae in Arthur Harbor. Krebs, W.N., et al. [1987, p.163-171, eng] 41-3427

- Microbiology of human pollution at Showa Station. Toyoda, S., et al. [1985, p.541-546, jpn] 41-3568

- Antarctic terrestrial ecosystem. Walton, D.W.H., [1987, p.83-93, eng] 41-3740

- Nitrogen in two contrasting antarctic bryophyte communities. Christie, P., [1987, p.73-93, eng] 41-3795

- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed. [1985, 160p., rus] 41-4118

- Ice flora in the central part of the Arctic Ocean. Mel'nikov, I.A., [1986, p.59-62, rus] 41-4197

- Microbial environment in Ross desert from satellite nanoclimate data, 1984-1986. Friedmann, E.I., et al. [1987, p.273-287, eng] 41-4627

- See also: Bacteria; Cryobiology; Soil microbiology

**Microclimatology**

- Structure and dynamics of forest landscapes in Karelia. Belousova, N.A., ed. [1985, 184p., rus] 41-189

- Types of landscapes in the Karelian ASSR. Volkov, A.D., et al. [1985, p.4-16, rus] 41-190

- Differentiation in forest conditions of mountain regions and phytocenotic productivity. Ziganshin, R.A., [1984, p.78-87, rus] 41-1001

- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Brattsev, A.P., ed. [1986, 119p., rus] 41-1167

- Mesoclimatic characteristics of the Timan-Pechora Regional Economic Complex. Voevodova, Z.I., [1986, p.46-56, rus] 41-1168

- Overall building enclosure evaluation in cold climates. Mill, P.A.D., et al. [1986, p.510-524, eng] 41-1385

- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). [1986, 126p., rus] 41-2213

- Radiation and heat regime of some high-mountain biogeocenoses. Kucherenko, V.E., [1986, p.66-86, rus] 41-2880

- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed. [1986, 81p., rus] 41-2916

- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al. [1986, p.36-41, rus] 41-2918

- Method for the continuous monitoring of snow: application to the cryotendolitic microbial community of Antarctica. Friedmann, E.I., et al. [1985, p.179-181, eng] 41-3322

- Snow cover distribution in a system of young poplar strips. Zarudnyi, I.A.K., [1987, p.45-46, rus] 41-3745

- Influence of natural environments on economic development of the North. Okisheva, L.N., [1986, p.17-19, rus] 41-4062

- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed. [1985, 160p., rus] 41-4118

- Thermal regime of upper soil layers in the Kolyma Basin. Alifimov, A.V., [1985, p.9-29, rus] 41-4119

- Microbial environment in Ross desert from satellite nanoclimate data, 1984-1986. Friedmann, E.I., et al. [1987, p.273-287, eng] 41-4627

- See also: Indoor climates

**Microrelief**

- Influence of paleo-cryogenic microrelief on erosional processes and soil formation in the central Russian Plain. Velichko, A.A., et al. [1986, p.102-113, rus] 41-1823

- Cryogenic processes in the formation of swamp microrelief. Maksimova, L.N., et al. [1986, p.147-151, rus] 41-2833

- Interrelationships among components of biogeocenoses in southern taiga. Smirnov, A.V., ed. [1986, 120p., rus] 41-2898

- Morphology and lithogenesis of rock streams. Govorushko, S.M., [1986, 120p., rus] 41-2901

- Peculiarities of mapping rock glaciers. Gorbunov, A.P., et al. [1986, p.5-22, rus] 41-3482

- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus] 41-4120

**Microscopy**

- See: Electron microscopy; Scanning electron microscopy

**Microstructure**

- Orographic layer cloud structure. Sassen, K., [1982, p.318-321, eng] 41-23

- Graupel characteristics in relation to the dynamics of Florida cumuli. Walsh, P.A., et al. [1982, p.362-365, eng] 41-35

- Hailstone growth and various microphysical parameters. Foster, M.P., et al. [1982, p.438-441, eng] 41-52

- Analysis and research of hailstone micro-structure. Wang, A.S., et al. [1982, p.450-452, eng] 41-55

- Micromorphology of soil during periglacial processes. Van Vliet-Lanoë, B., [1985, p.15-20, eng] 41-370

- Microstructure and the resistance of rock to tensile fracture. Peck, L., et al. [1985, p.11533-11546, eng] 41-496

- Evaluation of the rheological properties of columnar ridge sea ice. Brown, R.L., et al. [1986, p.55-66, eng] 41-1582

- Microstructure and thermodynamics of sea ice. Brown, R.L., [1987, p.209-213, eng] 41-2423

- Problems of cloud physics. Voloshchuk, N.I., ed. [1986, 249p., rus] 41-3669

- Aerosol samplers used in size distribution study. Berezinskii, N.A., et al. [1986, p.55-63, rus] 41-3671

- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus] 41-4120

**Microwaves**

- Cryospheric data management system for special sensor microwave imager DMSP data. Weaver, R., et al. [1985, p.411-415, eng] 41-219

**Microwaves (cont.)**

- Remote sensing of the Bering Sea ice cover. Cavalieri, D.J., et al, [1986, p.368-377, eng] 41-833
- Microwave observations of sea ice in the Bering and Greenland Seas. Grenfell, T.C., [1986, p.378-382, eng] 41-834
- Under-snow radar using multifrequency holography. Sakamoto, Y., et al, [1986, p.111-118, eng] 41-853
- Classifying sea ice with microwave imagery. Eppler, D.T., et al, [1986, p.10,661-10,695, eng] 41-1008
- Radio-wave attenuation in melting snow. Jain, Y.M., et al, [1985, p.68-69, eng] 41-1408
- Dielectric characteristics of snow in microwave frequency. Koizumi, S., et al, [1986, p.823-825, eng] 41-1467
- Microwave remote sensing—active and passive. Ulaby, F.T., et al, [1981, 2162p. (3 vols.), eng] 41-1508
- Regional differences in snowpacks in the northern U.S. as seen by the Nimbus-7 SMMR. Hall, D.K., et al, [1984, p.67-74, eng] 41-1948
- Observation of passive microwave emission from snowpack. Shiue, J.C., et al, [1984, p.75-85, eng] 41-1949
- Microwave ice prevention system. Hansman, R.J., Jr., [1982, 4 col., eng] 41-1995
- Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band. Raizer, V.I.U., et al, [1986, p.29-42, eng] 41-2207
- Passive microwave observations of sea ice growth. Grenfell, T.C., et al, [1986, p.826-831, eng] 41-2296
- Microwave dielectric, structural and salinity properties of sea ice. Arcone, S.A., et al, [1986, p.832-839, eng] 41-2297
- Microwave spectral emission from saline ice. Swift, C.T., et al, [1986, p.840-848, eng] 41-2298
- Snow water equivalent by satellite microwave radiometry. Hallikainen, M.T., et al, [1986, p.855-862, eng] 41-2300
- Snow wetness and sea-ice classification using SAR imagery. Eom, H.J., et al, [1986, p.937-939, eng] 41-2301
- Detection of aircraft icing using microwave radiometers. Papa Fotino, I.A., et al, [1986, p.975-982, eng] 41-2302
- Snowpack properties derived from remote sensing data. Burke, H.K., et al, [1981, 85p., eng] 41-2528
- Influence of depth hoar on microwave emission from snow in northern Alaska. Hall, D.K., [1987, p.225-231, eng] 41-3033
- MIZEX 84 ice surface measurements from the FS *Polarstern*. Burns, B.A., et al, [1986, p.30-40, eng] 41-3057
- Scientific challenges at the poles. Welch, J.P., et al, [1987, p.23-26, eng] 41-3408
- Microwave radiometer weather-correcting sea ice algorithm. Walters, J.M., et al, [1987, p.6521-6534, eng] 41-3643
- Snow cover mapping by microwave radiometry. Hallikainen, M., et al, [1986, p.209-214, eng] 41-3899
- Prospects of microwave remote sensing for snow hydrology. Rott, H., [1986, p.215-223, eng] 41-3900
- Satellite passive microwave ice maps. Thirkettle, F.W., [1986, p.939-945, eng] 41-3989
- Microwave snow signatures (1.5 mm to 3 cm) over Alaska. Chang, A.T.C., et al, [1987, p.153-160, eng] 41-4492
- Microwave propagation in the Canadian Arctic. Lam, I., [1986, 20p., eng] 41-4605
- Military engineering**
- Airfield pavement evaluation, Anchorage, Alaska. Alexander, D.R., [1986, 36p. + figs., eng] 41-524
- March under arctic conditions. Makarov, V., [1986, p.74-76, rus] 41-3932
- Military equipment**
- CRTC maintenance—beating the odds. Dixon, C.A., Jr., [1986, p.16-18, eng] 41-1839
- German automatic weather stations in the Arctic 1942-1945. Selinger, F., [1986, p.89-104, eng] 41-2339
- Driving commander's vehicle in snow fields. Gnidy, A., [1986, p.76-78, rus] 41-3931
- March under arctic conditions. Makarov, V., [1986, p.74-76, rus] 41-3932
- Operation of technical equipment in freezing weather. Vofshnikov, D., et al, [1987, p.78-80, rus] 41-3933
- Military facilities**
- Megastructures for mobilization. Flanders, S.N., [1986, p.10-11, eng] 41-410
- Assessment of a field water purification unit. Bouzoun, J.R., et al, [1986, 6p., eng] 41-529
- Military wastewater treatment systems in cold regions. Reed, S.C., [1986, 23p., eng] 41-859
- Military operation**
- Problems of chemical defence operations in extreme cold. Stearman, R.L., [1985, 46p. + 2 appends., eng] 41-477
- Age of the Arctic. Young, O.R., [1985, p.160-179, eng] 41-526
- Arctic/cold weather operations symposium, 1985; proceedings. [1986, 542p., eng] 41-924
- Overview of the Cold Weather Program. Kordenbrock, J.U., [1986, p.61-82, eng] 41-925
- Arctic environment. Reshew, J.W., [1986, p.83-100, eng] 41-926

- Seaway performance improvement program. Bubeck, R.B., [1986, p.101-122, eng] 41-927
- SHAREM cold weather experience. Oakes, J.R., [1986, p.149-161, eng] 41-929
- LAMPS MK III environmental capabilities. Olmstead, J., [1986, p.185-200, eng] 41-932
- Underway replenishment in cold weather. Lyon, G., [1986, p.215-221, eng] 41-934
- Degradation of surface ship operations in polar regions. Bales, S.L., et al, [1986, p.223-237, eng] 41-935
- Anti-icing and de-icing of naval surface ships. Garbe, G.H., [1986, p.263-282, eng] 41-937
- Prevention and retardation of ice formation at sea. Minasian, D.T., [1986, p.283-295, eng] 41-938
- Arctic ice impact assessment for naval surface combatants. Devine, E.A., et al, [1986, p.297-347, eng] 41-939
- Cold weather clothing. Wojtaszek, R., [1986, p.349-354, eng] 41-940
- Arctic surface warfare hovercraft. Schuler, J.L., [1986, p.355-377, eng] 41-941
- Ship icing in the polar regions. Rogalski, R., [1986, p.379-406, eng] 41-942
- NAWS—a hull stress monitoring system for arctic ships. Kendrick, A., et al, [1986, p.407-419, eng] 41-943
- Arctic environmental support. Denner, W., [1986, p.429-434, eng] 41-944
- Superstructure icing: non-suitability of current forecasting aids for navy ships. Jeck, R.K., [1986, p.439-445, eng] 41-946
- Bath iron works corporation cold weather operations studies for the CG 47 class cruiser program. Crowley, J.D., [1986, p.447-451, eng] 41-947
- Marine gas turbine inlet de-icing. Reinauer, G.A., [1986, p.457-461, eng] 41-949
- Arctic vessel research laboratory and program. Jeffrey, N.E., [1986, p.467-468, eng] 41-950
- Arctic radio wave propagation. Taagholt, J., [1985, p.7-11(7.1)12, eng] 41-958
- On the Yukon and Tanana: river trip was "no picnic". Staley, C., [1985, p.8-9, eng] 41-1837
- Avalanche. Strauss, W., [1985, p.26-27, eng] 41-1838
- Silent warrior. Kies, D., [1986, p.19-21, eng] 41-1840
- Man vs. McKinley. Dixon, C., et al, [1986, p.2-8, eng] 41-1841
- Glacier training. Hook, C., [1986, p.11, eng] 41-1842
- Effects of climate on combat in European Russia. [1986, 80p. + graphs, eng] 41-2063
- Second Workshop on Ice Penetration Technology, 1986. [1986, 659p., eng] 41-2652
- Sea ice forecasting. Benner, D.A., [1986, p.193-206, eng] 41-2659
- Ice penetrator scale model and full scale test results. Rychnovsky, R., [1986, p.385-414, eng] 41-2667
- Response of penetrators into ice targets. Kipp, R.J., et al, [1986, p.481-493, eng] 41-2673
- Thick ice penetrator. Swearingen, J.C., et al, [1986, p.495-520, eng] 41-2674
- Some developments in shaped charge technology. Mellor, M., [1986, p.575-604, eng] 41-2678
- Some developments in shaped charge technology. Mellor, M., [1986, 29p., eng] 41-3049
- Cold weather aspects of nuclear, biological and chemical operations. Tesko, S., [1985, 17p., eng] 41-3473
- Ice heat sinks. Part 1: Vertical systems. Lunardini, V.J., [1986, 107p., eng] 41-3815
- After-action report—Reforged '85. Liston, R.A., [1986, 20p., eng] 41-3816
- Winter field fortifications. Farrell, D., [1986, 50p., eng] 41-3817
- Ice heat sinks. Part 2: Horizontal systems. Lunardini, V.J., [1986, 104p., eng] 41-3818
- Effect of snow on vehicle-generated seismic signatures. Albert, D.G., [1987, p.881-887, eng] 41-3887
- Through the ice mining study—final report. Crawford, M.W., et al, [1983, 5 sections + append., eng] 41-3926
- March under arctic conditions. Makarov, V., [1986, p.74-76, rus] 41-3932
- Study of sea-spray icing of communications antennas—exploratory (NSAP project Q-5-79). [1981, 43p. + appends., eng] 41-4636
- Cold regions operation of diesel vehicles. Stupich, T.F., [1987, 45p. + append., eng] 41-4637
- Military research**
- Mine detection using non-sinusoidal radar: laboratory tests. Dean, A.M., Jr., et al, [1984, 99p., eng] 41-462
- Survivability of Army fiber optics systems. Wichansky, H., et al, [1981, p.110-117, eng] 41-583
- Arctic research in the national interest. Washburn, A.L., et al, [1986, p.633-639, eng] 41-1033
- Cold weather aspects of nuclear, biological and chemical operations. Tesko, S., [1985, 17p., eng] 41-3473
- Military supplies**
- See: Logistics
- Military transportation**
- Driving commander's vehicle in snow fields. Gnidy, A., [1986, p.76-78, rus] 41-3931
- Operation of technical equipment in freezing weather. Vofshnikov, D., et al, [1987, p.78-80, rus] 41-3933

**Mine shafts**

- Calculating frost penetration into rocks of a cylindrical cavity. Dugartysrenov, A.V., et al, [1986, p.21-24, rus] 41-3770
- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed, [1986, 81p., rus] 41-4546
- Selection of parameters for shaft pillars of placer mines. Panishev, V.V., [1986, p.7-10, rus] 41-4548
- Roof supports used in mines of permafrost areas. Efremov, A.P., et al, [1986, p.30-33, rus] 41-4552
- Ice-pillar roof supports in northern mines. Stoliarov, A.M., et al, [1986, p.38-47, rus] 41-4554
- Mineralogy**
- Geologic studies in Alaska by the U.S. Geological Survey during 1985. Bartsch-Winkler, S., ed, [1986, 173p., eng] 41-664
- Geologic field studies of the Miki Fjord area, East Greenland. Bird, D.K., et al, [1985, p.219-235, eng] 41-872
- Mineralogic distribution of the sand fraction due to ice drifting. Drapeau, G., et al, [1985, p.51-56, fre] 41-2286
- Minerals**
- Biogeochemical exploration for mineral deposits in forest lands and taiga. Kovalevskii, A.L., [1986, p.32-37, rus] 41-199
- Geochemical exploration in economically developing parts of taiga. Zagorskii, V.A., et al, [1986, p.145-148, rus] 41-200
- Alaska's mineral industry, 1985. Bundtzen, T.K., et al, [1986, 66p., eng] 41-569
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] 41-571
- Geological literature of the Alaska Peninsula to 1985. Wilson, F.H., et al, [1986, 113p., eng] 41-957
- Australia, Britain, and Antarctica. Millar, T.B., ed, [1986, 111p., eng] 41-2597
- Availability of mineral resources in the Antarctic. Roland, N.W., [1986, p.154-163, ger] 41-2921
- Biochemical anomalies in permafrost zone and their interpretation. Lobanova, A.B., [1987, p.170-172, eng] 41-3163
- Exploitation of antarctic minerals. Crockett, R.N., et al, [1987, p.121-132, eng] 41-3741
- Sulphide in subglacial exploration, St. Elias Mts., B.C. Day, S.J., et al, [1987, p.723-730, eng] 41-4080
- Role of gas-liquid inclusions in cryogenic shattering of quartz. Rogov, V.V., [1987, p.81-85, rus] 41-4169
- See also: Clay minerals
- Mines (excavations)**
- Frozen ice-shingle-gravel mixtures for roof supports in northern mines. Markov, V.S., et al, [1986, p.201-208, rus] 41-2179
- Reciprocal influence of underground and open mining under permafrost conditions. Los, I.N., [1986, p.33-37, rus] 41-4553
- See also: Quarries
- Mines (ordnance)**
- Mine detection using non-sinusoidal radar: laboratory tests. Dean, A.M., Jr., et al, [1984, 99p., eng] 41-462
- Through the ice mining study—final report. Crawford, M.W., et al, [1983, 5 sections + append., eng] 41-3926
- Mining**
- Peculiarities of rock pressure development in mining excavations when the roof is a difficulty caving permafrost. Popov, S.F., [1985, p.93-97, rus] 41-195
- Control of thermal regime during mine excavation in permafrost. Manicheva, O.M., [1985, p.144-146, rus] 41-196
- Task economic complexes in northern regions. Maslennikov, V.V., [1985, p.28-32, rus] 41-206
- Effectiveness of different versions of mining development in the Polar Urals. Sandrigallo, I.N., [1985, p.45-49, rus] 41-209
- Geological literature of the Alaska Peninsula to 1985. Wilson, F.H., et al, [1986, 113p., eng] 41-957
- State of permafrost mined by the express method. Umantsev, R.F., [1985, p.52-54, rus] 41-1018
- Simulation of a multi-seam dragline operation in a sub-arctic mine. Bandopadhyay, S., et al, [1986, p.47-54, eng] 41-1027
- Trends in the development of new mining regions. Agranat, G.A., [1986, p.14-25, rus] 41-1821
- Transportation considerations in Arctic mining development. Giegerich, H., [1986, p.352-367, eng] 41-2035
- Mapping the distribution of polluted ground water in cryogenic hydrogeological structures. Volkova, V.P., et al, [1986, p.95-99, rus] 41-2088
- Calculating the amount of solar radiation heat reaching mine roads. Bazavluk, V.A., [1986, p.192-200, rus] 41-2100
- Using snow for dust control in northern mines. Osodoev, M.T., et al, [1986, p.193-196, rus] 41-2177
- Using artificial snow for dust control during mass-detonations in mines. Bitkolov, N.Z., et al, [1986, p.197-200, rus] 41-2178
- Iron ore wastes used in construction materials in the North. Prokofeva, V.V., et al, [1986, 176p., rus] 41-2214

- Some problems in rationalizing the use of natural resources in the BAM zone. Mikhailov, I.U.F., (1986, p.35-44, rus) 41-2248
- Pipeline transport in mining industry. Pokrovskaya, V.N., (1985, 193p., rus) 41-2712
- Biologic recultivation of industrial tailings in the Far North. Pereverzev, V.N., et al, (1986, 104p., rus) 41-2752
- Dust control on quarry roads at subzero temperatures. Loboda, A.I., et al, (1985, p.135-136, rus) 41-2771
- Using supermafrost ground water in normalizing the air in the Mir pipe quarry. Prudnikov, V.K., (1985, p.144-145, rus) 41-2772
- Dust control based on acoustics, centrifugal and foam-precipitation principles. Sergeev, V.S., (1985, p.152-153, rus) 41-2773
- Dust control in coal quarries at subzero temperatures. Kupin, A.N., et al, (1985, p.153-154, rus) 41-2774
- Morphology and lithogenesis of rock streams. Govorushko, S.M., (1986, 120p., rus) 41-2901
- Physico-chemical processes of mining. Mathematical models of leaching ores and thawing frozen rocks. Ignatov, A.A., (1986, 97p., rus) 41-3015
- Artificial freezing of cohesive soils for preventing adhesion. Mochalov, V.I., et al, (1986, p.15-17, rus) 41-3768
- Determining the state of stress in shaft timbering during thawing. Abashin, S.I., et al, (1986, p.28-29, rus) 41-3769
- Rock failure under thermo-cyclic loads. Moskalev, A.N., et al, (1987, 248p., rus) 41-4152
- Improvement of parameters and increase in the reliability of mining machines. Ponomarenko, I.U.F., ed, (1986, 82p., rus) 41-4524
- Improving the reliability of 204M excavators under northern conditions. Osipova, T.V., et al, (1986, p.11-16, rus) 41-4525
- Mining technology designed for saving mineral resources. Al'tahuler, V.M., ed, (1987, 94p., rus) 41-4558
- Methods of transporting dumped refrozen ore masses. Eremin, G.M., (1987, p.41-44, rus) 41-4559
- See also: Placer mining
- Models**
- Note on ice scaling. Jones, N., (1986, p.134-135, eng) 41-259
- Increasing the safety of energy-producing structures under dynamic loading. Shefnin, I.S., ed, (1985, 113p., rus) 41-426
- Modeling dynamic phenomena in power engineering structures. Samsonova, T.I., et al, (1985, p.7-13, rus) 41-427
- Snow acoustic impedance model. Buser, O., (1986, p.71-92, eng) 41-1262
- Ice movement velocity at localized water-level drops above spillway outlets. Raspopin, G.A., et al, (1986, p.71-74, rus) 41-1395
- Providing controllability for an icebreaker running astern in heavy ice. Pershita, R.I.A., (1986, p.8-10, rus) 41-1576
- Snow cover erosion during wind-stream flow around an obstacle. Martynenko, A.A., (1986, p.160-165, rus) 41-1661
- Using pattern recognition methods in engineering-glaciological terrain analysis. Blagoveshchenskii, V.P., et al, (1986, p.165-169, rus) 41-1662
- Heat transfer from waves impacting on ice surface. Gogolev, E.S., et al, (1986, p.58-62, eng) 41-1854
- Climatic belts in the case of a unipolar glaciation. Flohn, H., (1984, p.609-620, eng) 41-1974
- Snow as construction material (bibliographic review of Russian and foreign publications. Kvon, I.A.D., (1986, p.95-105, rus) 41-2162
- Wind tunnel investigation on the riming of snowflakes. Lew, J.K., et al, (1986, p.2392-2417, eng) 41-2360
- Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al, (1986, 63p., rus) 41-2362
- Point probability distributions of frozen soil. Zuzel, J.F., et al, (1986, p.1681-1686, eng) 41-2501
- Climate simulation and change: a simple energy balance climate model. Goldenberg, S.D., (1985, 212p., eng) 41-2579
- Hydraulic construction in ports and engineering research in coastal zones of seas. Kostikov, V.D., ed, (1986, 169p., rus) 41-2709
- Interaction of pressure ridges with cylindrical supports of hydraulic structures. Belov, A.B., et al, (1986, p.34-37, rus) 41-2710
- Methods of calculating melt flow characteristics. Vinogradov, I.U.B., (1985, p.83-89, rus) 41-2730
- Fit of statistical distributions to ice nuclei concentration data. Pérez, P.J., et al, (1984, p.135-140, spa) 41-2749
- Reconstructions of Wisconsin Laurentide ice sheet. Fisher, D.A., et al, (1985, p.229-238, eng) 41-2760
- Correlation of model and full-scale ice navigation experiments. Wolff, K., (1986, p.43-48, ger) 41-2859
- Corps of engineers seek ice solutions. Frankenstein, G.E., (1987, p.5-7, eng) 41-3140
- Small-volume fog chamber with automatic recording of ice crystals. Gorbunov, S.Z., et al, (1986, p.248-249, eng) 41-3161
- Studies of ice-edge zones of Arctic seas. Nikolaev, I.U.V., et al, (1986, p.131-138, eng) 41-3264
- Geographic modeling of evaporation from water-bodies of mountainous countries. Gvakharia, V.K., (1986, 114p., rus) 41-3366
- Underground hydraulic structures in permafrost. Gvirtz, G.I.A., et al, (1986, p.190-197, rus) 41-3462
- Coupled marine ice-stream-ice-shelf model. Muszynski, I., et al, (1987, p.3-15, eng) 41-3590
- Modelling of continental and sea ice as part of climate models. Nagurnyi, A.P., (1986, 104p., rus) 41-4092
- Isothermal phase change model for freezing and thawing soils 1: development. Hromadka, T.V., II, (1986, p.113-117, eng) 41-4134
- Isothermal phase change model for freezing and thawing soils 2: model. Hromadka, T.V., II, et al, (1986, p.118-123, eng) 41-4135
- Sloped roof snow loads using simulation. Sack, R.L., et al, (1987, p.1820-1833, eng) 41-4173
- See also: Avalanche modeling; Ice models; Lattice models; Mathematical models; Simulation
- Modular construction**
- Mobile-crew and modular construction methods in permafrost areas. Petrov, I.M., et al, (1986, p.49-51, rus) 41-882
- Experience gained in building electric substations in the Far North. Sosiak, N.V., (1986, p.2-3, rus) 41-908
- Substations 110 kv with the equipment housed in superblock structures. Ezrakhovich, L.O., (1986, p.3-6, rus) 41-909
- Substations 110/6-10 kv built in the Urengoy gas field area. Galt, S.I.A., et al, (1986, p.6-7, rus) 41-910
- Analyzing transportation costs of modular construction objects in permafrost regions. Rastorguev, G.A., (1986, p.19-20, rus) 41-1527
- Building mobile structures on northern BAM sites. Makeev, A.M., et al, (1986, p.21-23, rus) 41-1533
- Modular construction of oil and gas industry objects. Manual. Batalin, I.U.P., ed, (1986, 576p., rus) 41-1746
- Transportation of heavy blocks on ice-snow roads. Rastorguev, G.A., et al, (1986, p.13-14, rus) 41-2780
- Mobile dwellings for the North. Saprykina, N.A., (1986, 215p., rus) 41-3012
- Automatic control system for diesel ventilation aggregates of air-cushion vehicles. Glukhikh, V.G., et al, (1987, p.38-39, rus) 41-3392
- Moisture**
- Influence of moisture condition on frost heave in clay. Xu, B., et al, (1986, p.217-222, chi) 41-1418
- Types and characteristics of modern periglacial along the Qinghai-Xizang Highway. Wang, S., (1986, p.149-158, chi) 41-1462
- Freeze-thaw of pore moisture in sandy rocks. Medvedskii, R.I., (1986, p.543-549, eng) 41-1894
- Vents and vapor retarders for roofs. Tobiasson, W., (1986, 11p., eng) 41-4575
- See also: Humidity; Soil water; Water content
- Moisture transfer**
- Moisture redistribution in the snow cover of Central Yakutia. Fedoseeva, V.I., et al, (1986, p.104-107, rus) 41-115
- Mathematical model of frost heave in freezing soils. Hromadka, T.V., II, (1980, 178p., eng) 41-899
- Roughness and transfer coefficients over snow and sea ice. Andreas, E.L., (1986, 19p., eng) 41-1263
- Evaluating the solutions of nonlinear problems on freezing and thawing of moist ground. Danielian, I.U.S., et al, (1986, p.350-353, rus) 41-2306
- Heat and moisture transfer in a partly frozen nonheaving soil. Kung, S.K.J., et al, (1986, p.1114-1122, eng) 41-2474
- See also: Soil water migration
- Molecular energy levels**
- Difference in energy between cubic and hexagonal ice. Hands, Y.P., et al, (1986, p.7009-7010, eng) 41-188
- Free energies of crystal-vapor systems. Broughton, J.Q., et al, (1986, p.5741-5748, eng) 41-497
- Structure and dynamics of crystal-melt systems. Broughton, J.Q., et al, (1986, p.5749-5758, eng) 41-498
- Surface free energies of crystal-liquid systems. Broughton, J.Q., et al, (1986, p.5759-5768, eng) 41-499
- Bound water and ice transformations in rock and ground systems. Ershov, E.D., (1986, p.8-18, rus) 41-2081
- Molecular structure**
- Lattice vibrations and infrared absorption of ice Ih. Marchi, M., et al, (1986, p.2414-2418, eng) 41-395
- Nature of the 'free' OH groups in water. Giguere, P.A., et al, (1986, p.341-344, eng) 41-525
- Bound water and ice transformations in rock and ground systems. Ershov, E.D., (1986, p.8-18, rus) 41-2081
- Kinetics and mechanism of homogeneous crystallization of water. Golubev, V.N., (1986, p.5-10, rus) 41-2146
- Extended lattice model of water: two-sublattice, two-orientation model. Meijer, P.H.E., et al, (1982, p.124-142, eng) 41-2245
- Electronic structure of hydrogen-bonded H<sub>2</sub>O. Schmeisser, D., et al, (1983, p.3279-3286, eng) 41-2318
- Molecular-packing analysis of the crystal structures of ice. Hall, D., et al, (1985, p.169-172, eng) 41-2334
- Low temperature X-ray analysis of water/poly(oxyethylene) systems. Bogdanov, B., et al, (1986, p.628-634, eng) 41-2573
- Raman scattering spectra at the water-ice phase transition. Glushkov, S.M., et al, (1986, p.836-839, rus) 41-3686
- O-H stretching vibrations of coupled O-D—O-D pairs in H<sub>2</sub>O ice Ic. Whalley, E., et al, (1987, p.7244-7245, eng) 41-3760
- Configurational entropy of partially ordered ice. Howe, R., et al, (1987, p.6443-6445, eng) 41-4180
- Multiplicity of dielectric relaxation times of dispersed ice microcrystals. Pissis, P., et al, (1987, p.195-211, eng) 41-4361
- Monitors**
- Analysis and monitoring of avalanche glaciostystems. Kanaev, L.A., (1986, p.43-53, rus) 41-104
- Monitoring of thawing permafrost slopes. McRoberts, E.C., et al, (1986, p.133-151, eng) 41-2520
- Remote sensing in the study of elements of moisture supply to geosystems. Grin, A.M., ed, (1986, 113p., rus) 41-2732
- Remote sensing of heat and moisture transfer in geosystems. Kulikov, I.U.N., (1986, p.97-105, rus) 41-2736
- Method for the continuous monitoring of snow: application to the cryoendolithic microbial community of Antarctica. Friedmann, E.I., et al, (1985, p.179-181, eng) 41-3322
- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed, (1986, 192p., rus) 41-3513
- Spaceborne photography methods of monitoring geosystems in the new economic development areas of Siberia. Plastinin, L.A., (1986, p.9-14, rus) 41-3514
- Moon**
- Phase transitions in solid methane at high pressure. Trappeniers, N.J., (1985, p.49-58, eng) 41-1696
- Project of an inhabited lunar base. Shevchenko, V.V., (1986, p.85-98, rus) 41-2308
- Water in regolith from Mare Crisium (Luna 24)? Akhmanova, M.V., et al, (1978, p.285-288, rus) 41-3208
- Moorings**
- Field studies of mooring structures in the Far North. Kizim, A.G., (1986, p.82-85, rus) 41-904
- Calculating pile foundations for hydraulic structures. Levachev, S.N., et al, (1986, 133p., rus) 41-1747
- How to moor in ice. Bragineta, O., (1986, p.60-61, rus) 41-1792
- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., (1986, p.92-94, rus) 41-2161
- Experience in ice dam construction. Vdovin, I.U.I., et al, (1986, p.177-183, rus) 41-2174
- Hydraulic construction in ports and engineering research in coastal zones of seas. Kostikov, V.D., ed, (1986, 169p., rus) 41-2709
- Influence of sub-zero temperatures on the performance of rubber shock absorbers. Kotta, A.N., et al, (1986, p.95-98, rus) 41-2711
- Designing moorings built of fused enlarged blocks. Goncharov, V.V., et al, (1986, p.25-26, rus) 41-2788
- Studies and calculations in structural design and building technology of hydraulic transport structures. Shkol'nikov, I.E., ed, (1986, 96p., rus) 41-2908
- Designing filled-up piers with ice-bearing cores. Sokolov, A.V., (1986, p.34-42, rus) 41-2909
- Improvement of technology and quality control of concreting moorings in the northeastern Ob-Irtys' Basin. Poliakov, B.I., et al, (1986, p.59-68, rus) 41-2910
- 1984-1985 current observations in the East Greenland Current: a preliminary description. Muennich, R.D., et al, (1986, p.41-53, eng) 41-3058
- Engineering geocryology in hydraulic construction. Bliano, G.F., ed, (1986, 205p., rus) 41-3439
- Year-round navigation effect on arctic mooring structures. Budin, A.I.A., et al, (1986, p.142-150, rus) 41-3457
- Moraine lakes**
- See: Glacial lakes
- Moraines**
- Evolution of marginal zone of the Vitkovski Glacier (South Spitsbergen). Andrzejewski, L., et al, (1985, p.527-535, eng) 41-75
- Geologic conditions of the burial of Pleistocene glacier ice in the Yenisey River area. Astakhov, V.I., (1986, p.72-78, rus) 41-100
- Buried glacier ice and related lithomorphogenetic problems. Karukiapp, R.I.A., (1986, p.78-83, rus) 41-109
- Biogeographic evolution of a moraine sector in Svalbard. Persard, T., (1985, p.33-46, fre) 41-371
- Calculating hydrological characteristics of the Mertubakher Lake outburst. Glazyrin, G.E., et al, (1986, p.36-43, rus) 41-546
- Moraine ridge deposition on Bovergreen glacial foreland. Gallagher, J., (1985, p.61-73, eng) 41-585
- Relative dating of Neoglacial moraine ridges in North Norway. Innes, J.L., (1984, p.53-63, eng) 41-625
- Role of debris cover in the thermal physics of glaciers. Bozhinskii, A.N., et al, (1986, p.255-266, eng) 41-487
- Glacier mapping of rock glaciers, moraines and buried ice. Whalley, W.B., et al, (1986, p.181-183, eng) 41-766

## Moraines (cont.)

- Glaciology of mountainous regions. Suslov, V.F., ed, [1986, 136p., rus] 41-769
- Influence of moraines on turbidity of glacial waters. Tikhonovskaya, A.A., et al, [1986, p.123-128, rus] 41-783
- Glacier outlet of the Vatnajökull in the upper course of the Djupa, southern Iceland. Jaksh, K., [1984, p.97-103, ger] 41-805
- Mudflow formation and transformation processes in the Gerkhozhansu River basin. Dokukin, M.D., [1985, p.58-71, rus] 41-845
- Intrasecular glacier variations in northern Tien Shan according to lichenometric data. Pomortsev, O.A., [1986, p.403-412, rus] 41-886
- Moraine stratigraphy of Bugaboo Glacier, British Columbia. Osborn, G., [1986, p.171-178, eng] 41-1190
- Late Quaternary glacial chronology for Baffin Island, NWT. Dowdeswell, J.A., [1984, p.311-320, eng] 41-1233
- Chemical element balance in the end-moraine landscapes of southern taiga. Shitikova, T.E., [1985, p.104-113, rus] 41-1818
- Dating exposed rock surfaces in the Arctic by lichenometry. Innes, J.L., [1986, p.253-259, eng] 41-1869
- Zonation and ecology of high mountain permafrost in Scandinavia. King, L., [1986, p.131-139, eng] 41-1871
- Neoglaciation in the Coast Mts., B.C., Canada. Ryder, J.M., et al, [1986, p.273-287, eng] 41-1928
- Effect of bedrock on environments of Spitsbergen glaciers. Drodowski, E., [1985, p.397-413, eng] 41-1912
- Sedimentation at the foot of volcanoes in various climatic settings. Kuralenko, N.P., [1986, 111p., rus] 41-2363
- Dating of the Little Ice Age glacier advance, SW Norway. Matthews, J.A., et al, [1986, p.369-375, eng] 41-2472
- Rock glaciers. Gorbunov, A.P., et al, [1986, p.73-77, rus] 41-2535
- Examples of studying landslide processes in Canada. Rechitskii, V.I., [1986, p.96-104, rus] 41-2548
- Geology and origin of the Elephant Moraine on the east antarctic ice sheet. Faure, G., et al, [1985, p.11-12, eng] 41-2623
- Reconstruction of Little Ice Age events in the Canadian Rocky Mountains. Luckman, B.H., [1986, p.17-28, eng] 41-2703
- Briophytes in the Polar-Alpine Botanical Garden. Konstantinova, N.A., et al, [1986, p.8-12, rus] 41-2776
- Inadequate norms concerning the increase of winter earthwork costs. Myznikov, I.U.N., [1987, p.41-44, rus] 41-2799
- Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p., rus] 41-2911
- Push-moraines and glacier-contact fans in marine and terrestrial environments. Boulton, G.S., [1986, p.677-698, eng] 41-3072
- Rock glaciers of the Dzhetim-Bel Range, Central Tien Shan. Tarakanov, A.G., [1987, p.63-67, rus] 41-3081
- Biochemical anomalies in permafrost zone and their interpretation. Lobanova, A.B., [1987, p.170-172, eng] 41-3163
- Flora and vegetation of mosses in ice-free areas of Soya Coast and Prince Olav Coast, East Antarctica. Kanda, H., [1981, p.91-100, eng] 41-3567
- Buried Pleistocene glacier ice on the Yenisey River. Astakhov, V.I., [1986, p.286-295, eng] 41-3619
- Relief and deposits of the Severnaya Zemlya islands. Makeev, V.M., et al, [1986, p.331-338, eng] 41-3625
- Meteorological measurements at Soler Glacier, Patagonia, in 1985. Fukami, H., et al, [1987, p.31-36, eng] 41-3825
- Moraine formation at Soler Glacier, Patagonia. Aniya, M., [1987, p.107-117, eng] 41-3835
- Recent retreat of Soler Glacier, Patagonia as seen from vegetation recovery. Sweda, T., [1987, p.119-124, eng] 41-3836
- Hydrometeorological regime and dynamics of Lake Isayk-Kul. Pomortsev, O.A., ed, [1988, 153p., rus] 41-3870
- Morphosedimentary zones in the Bluenose Lake region, District of Mackenzie. St-Onge, D.A., et al, [1987, p.89-100, eng] 41-4010
- Acoustic survey and glacial history of Adams Lake, Labrador. Bell, T., et al, [1987, p.101-110, eng] 41-4011
- Holocene glacier fluctuations. Osborn, G., et al, [1987, p.26-28, eng] 41-4098
- Genesis of the push moraine at Kötlujökull, Iceland: a commentary. Humlum, O., et al, [1985, p.127-132, eng] 41-4131
- Moraines and surface melt on glaciers. Rogerson, R.J., et al, [1986, p.350-354, eng] 41-4287
- Glacial floods and their control. Mochalov, V.P., et al, [1986, p.104-108, 216-219, rus] 41-4351
- Artificial drainage for prevention of glacial lake bursts. Nurkadilov, L.K., et al, [1986, p.108-110, 220-221, rus] 41-4352
- Calculating the burst and flooding of moraine-dammed glacial lakes. Kerenkulov, V.A., et al, [1986, p.110-113, 221-224, rus] 41-4353
- Origin and evolution of Goes Lake, Spitsbergen. Grzes, M.G., et al, [1986, p.122-124, 233-234, rus] 41-4355
- Morphogenesis**  
See: Geomorphology
- Mortars**  
Fatigue and freeze-thaw resistance of epoxy mortar. Biswas, M., et al, [1985, p.33-37, eng] 41-647
- Porosity and frost resistance of portland cement mortars. Feldman, R.F., [1986, p.973-989, eng] 41-1154
- Effects of freeze-thaw cycles on the microstructure of hydration products. Pigeon, M., et al, [1986, p.1-19, eng] 41-4141
- Mosses**  
Botany of Bouvet Island. [1986, 79p., eng] 41-915
- Bryophytes on Bouvetöya. Bell, B.G., et al, [1986, p.11-22, eng] 41-917
- Transplantation methods for lichen indication. Trass, Kh.Kh., [1985, p.140-144, rus] 41-1041
- Seasonal environmental changes on mosses at Showa Station. Kanda, H., [1986, p.17-26, eng] 41-1043
- Pollen, vegetation and climatic relationships along the Dalton Highway, Alaska. Short, S.K., et al, [1986, p.57-72, eng] 41-1188
- Balsam poplar in northern Alaska. Edwards, M.E., et al, [1985, p.271-277, eng] 41-1248
- Southern tundras of Taymyr. Chernov, I.U.I., ed, [1986, 208p., rus] 41-1331
- Soil algae in southern tundras of Taymyr. Sdobnikova, N.V., [1986, p.68-79, rus] 41-1333
- Hepatic mosses in southern tundra near Kresty village. Zhukova, A.L., [1986, p.80-88, rus] 41-1334
- Leafy mosses of the Kresty village area. Kannukene, L.R., et al, [1986, p.89-100, rus] 41-1335
- Man-induced erosion in Bol'shezemel'skaya tundra. Zharkova, I.U.G., [1986, p.94-98, rus] 41-1794
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed, [1986, 198p., rus] 41-2373
- Dynamics of plant communities following the felling of forest. Ziabchenko, S.S., [1986, p.5-22, rus] 41-2374
- Soil restoration in felled areas of bilberry pine forests. Voronova, T.G., [1986, p.22-31, rus] 41-2375
- All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks. Novosibirsk, Aug. 26-28, 1986. Summaries. [1986, 165p., rus] 41-2456
- Preliminary results of studying mosses in the "Stolby" and Sayan-Shushenskoye preservation parks. Vasil'ev, A.N., [1986, p.70-72, rus] 41-2457
- Liverwort mosses of the Matuiyakh river (Yamal Peninsula). Zhukova, A.L., et al, [1986, p.642-649, rus] 41-2561
- Problems of physical geography and geobotanics. Selected works. Sochava, V.B., [1986, 343p., rus] 41-2753
- Brio-lichenological investigations in the USSR. Shliakov, R.N., ed, [1986, 118p., rus] 41-2775
- Briophytes in the Polar-Alpine Botanical Garden. Konstantinova, N.A., et al, [1986, p.8-12, rus] 41-2776
- Analysis of endemic species of moss flora in Central Asia. Mamatkulov, U.K., [1986, p.39-49, rus] 41-2777
- Classification of the lichen and green-moss pine forests of the northwestern European USSR. Sambuk, S.G., [1986, p.1468-1479, rus] 41-3023
- Forest fire effect on tundra vegetation. Polozova, T.G., [1986, p.1657-1663, rus] 41-3025
- Nitrogen of a moss ecosystem on glacial outwash sands, New Hampshire. Bowden, R.D., [1987, 149p., eng] 41-3346
- Changes in ecosystems of the North due to economic development. Kriuchkov, V.V., [1985, p.76-83, rus] 41-3438
- Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., [1986, p.62-63, rus] 41-3541
- Flora and vegetation of mosses in ice-free areas of Soya Coast and Prince Olav Coast, East Antarctica. Kanda, H., [1981, p.91-100, eng] 41-3567
- Nitrogen in two contrasting antarctic bryophyte communities. Christie, P., [1987, p.73-93, eng] 41-3795
- Bioindications of natural environments in the North. Kriuchkov, V.V., [1987, p.60-67, rus] 41-4568
- Motor vehicles**  
Device for attachment to motor vehicle windows to prevent fogging or icing. Schmitt, W., [1983, 6 col., eng] 41-1767
- Air and ice road transportation to support northern mines. Tamblin, H., [1986, p.368-375, eng] 41-2036
- For northern construction sites. Malyshev, A.I.A., [1986, p.49-50, rus] 41-2792
- Calculational method for determination of carburetor icing rate. Nazarov, V.I., et al, [1985, p.544-546, eng] 41-2944
- Cold starting ability of in-service M113 vehicles. Stupich, T.F., et al, [1986, 17p. + appends., eng] 41-3010
- Moving loads on sea ice. Squire, V.A., et al, [1987, p.569-575, eng] 41-3855
- Driving commander's vehicle in snow fields. Gnidy, A., [1986, p.76-78, rus] 41-3931
- March under arctic conditions. Makarov, V., [1986, p.74-76, rus] 41-3932
- Operation of technical equipment in freezing weather. Vofloshnikov, D., et al, [1987, p.78-80, rus] 41-3933
- Environmental impact on motor vehicle transport in the North. Belinskii, B.V., [1986, p.168-169, rus] 41-3978
- Mountain glaciers**  
Waves on glacial beds. Mazo, V.L., [1986, p.20-26, rus] 41-101
- Volcanism and glaciers in the Anthropogene. Melekestsev, I.V., [1986, p.27-35, rus] 41-102
- Calculation and prediction of the regime and distribution of mountain glaciers. Tokmagambetov, G.A., et al, [1985, 159p., rus] 41-518
- Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed, [1986, 84p., rus] 41-543
- Calculating hydrological characteristics of the Mertsbakker Lake outburst. Glazyrin, G.E., et al, [1986, p.36-43, rus] 41-546
- Climatic variation and runoff from Alpine glaciers. Collins, D.N., [1984, p.127-145, eng] 41-630
- Explanatory text to the map of Lewis Glacier, Mount Kenya, 1983. Patzelt, G., et al, [1984, p.177-195, ger] 41-634
- Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed, [1984, 110p., rus] 41-721
- Mapping of Soler Glacier, Chile. Aniya, M., et al, [1986, p.8-10, eng] 41-729
- Map of the Mount Gongga Glacier. Chen, J., [1986, p.34-36, eng] 41-734
- Supraglacial debris on the Khumbu Glacier, Nepal. Nakawo, M., et al, [1986, p.129-131, eng] 41-754
- Glaciology of mountainous regions. Suslov, V.F., ed, [1986, 136p., rus] 41-769
- Mass balance and trends in glacier changes in the USSR. Akbarov, A.A., et al, [1986, p.43-59, rus] 41-775
- Formulas for calculating air temperature and global radiation over glaciers. Kononov, V.G., et al, [1986, p.71-80, rus] 41-777
- New formula for calculating the volume of mountain glaciers. Mazo, A.B., et al, [1986, p.88-98, rus] 41-779
- Mass balance of Golubin Glacier. Ermolov, A.A., et al, [1986, p.98-102, rus] 41-780
- Mudflow formation and transformation processes in the Gerkhozhansu River basin. Dokukin, M.D., [1985, p.58-71, rus] 41-845
- Intrasecular glacier variations in northern Tien Shan according to lichenometric data. Pomortsev, O.A., [1986, p.403-412, rus] 41-886
- Recent fluctuations of mountain glaciers in the Northern Hemisphere. Makarevich, K.G., et al, [1986, p.25-33, 157-163, eng] 41-1050
- Studying the sensitivity of mass-balance model including calculations of temperature profile inside the glacier. Gruell, W., et al, [1986, p.34-38, 164-168, eng] 41-1051
- Induced fluctuations of the Shumskiy glacier in Dzhangarskiy Alatau. Cherkasov, F.A., et al, [1986, p.38-44, 168-173, eng] 41-1052
- Calculating basic characteristics of mountain glaciers under climatic changes. Glazyrin, G.E., [1986, p.44-47, 173-175, eng] 41-1053
- New method of using glaciers in monitoring climatic changes. Koerner, R.M., [1986, p.47-52, 175-179, eng] 41-1054
- Influence of large-scale atmospheric processes on the fluctuations of glaciers. Denisova, T.I.A., et al, [1986, p.52-58, 179-185, eng] 41-1055
- Role of evaporation from snow and ice in mass balance of glaciers. Kaser, G., [1986, p.59-63, 185-188, eng] 41-1056
- New Zealand glaciers. Fitzharris, B.B., et al, [1986, p.84-89, 206-208, eng] 41-1058
- Fluctuations of Heard Island glaciers and related climatic changes. Allison, A., et al, [1986, p.89-95, 209-214, eng] 41-1059
- Glacier dynamics of the Altai-Sayan Mountain System for the last 150 years. Reviakin, V.S., et al, [1986, p.95-99, 214-216, eng] 41-1060
- Formulas for calculating glacier mass balance. Xie, Z., et al, [1986, p.105-110, 223-227, eng] 41-1062
- Comparing mass-balance components of valley glaciers in temperate latitudes. Menshutina, V.M., [1986, p.112-116, 229-233, eng] 41-1064
- Late Quaternary moraines in the Chimborazo area, Ecuador. Clapperton, C.M., et al, [1985, p.135-142, eng] 41-1225
- New progress of glacier inventory in Tianshan Mountains. Liu, C., et al, [1986, p.167-170, chi] 41-1464
- Movement on the ice front. Gellatly, A., et al, [1986, p.294-299, eng] 41-1512
- Soviet glaciological studies in 1985. Kotliakov, V.M., et al, [1986, p.3-10, rus] 41-1632
- Mathematical model and forecasts of thermokarst evolution. Grigorian, S.S., et al, [1986, p.45-49, rus] 41-1636



- Calculating mean firn line altitude of mountain glaciers. Glazyrin, G.E., et al, [1986, p.64-68, rus] 41-1639
- Snow accumulation at the alimentation-limit altitude of Spitsbergen glaciers. Krenke, A.N., et al, [1986, p.90-93, rus] 41-1644
- Changes in forms of mountain glaciers in the Polar Urals. Tiufin, A.S., et al, [1986, p.96-99, rus] 41-1646
- Behavior of the Medvezhij glacier during 1982-1984. Butnitskiĭ, A.B., et al, [1986, p.99-106, rus] 41-1647
- Compiling dendroclimatograms for distinguishing glaciation conditions. Solomina, O.N., [1986, p.106-112, rus] 41-1648
- Results of sounding Altai glaciers with a portable radar. Nikitin, S.A., et al, [1986, p.116-121, rus] 41-1650
- Recent glaciation of the Pekul'ney Range. Sedov, R.V., et al, [1986, p.128-130, rus] 41-1653
- Calculating runoff from the Tadzhikistan glaciers. Musoev, Z., [1986, p.131-135, rus] 41-1654
- Some results and prospects for studying mass balance of glaciers (according to materials of a Hamburg seminar in 1983). Kotliakov, V.M., et al, [1986, p.179-193, rus] 41-1666
- Glacial and periglacial investigations in Skidadalum, Tröllaskagi, Northern Iceland. Müller, H.-N., et al, [1986, p.1-18, eng] 41-1788
- Effect of bedrock on environments of Spitsbergen glaciers. Drozdowski, E., [1985, p.397-413, eng] 41-2192
- Glacial giants. History (of origin, existence and deterioration of great glaciers. Balandin, R.K., [1986, 175p., rus] 41-2252
- Glacier systems in the Soviet northeast. Krenke, A.N., et al, [1980, p.166-185, eng] 41-2343
- Thermophysics of glaciers. Zotikov, I.A., [1986, 275p., eng] 41-2565
- Photogrammetry study of volcano-glacier interactions. Mount Wrangell, Alaska. Benson, C.S., et al, [1986, p.813-827, eng] 41-2742
- Rock glaciers of the Dzhetim-Bel Range, Central Tien Shan. Tarakanov, A.G., [1987, p.63-67, rus] 41-3081
- Using satellite survey data for studying mass transfer in glacial systems. Nosenko, G.A., [1986, p.26-31, rus] 41-3211
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270
- Geographic modeling of evaporation from water-bodies of mountainous countries. Gvakharia, V.K., [1986, 114p., rus] 41-3366
- Thilisa Glacier (glaciological and hydrometeorological investigations). Giginiahlvi, G.N., ed, [1986, 116p., rus] 41-3367
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481
- Relief and deposits of the Severnaya Zemlya islands. Makeev, V.M., et al, [1986, p.331-338, eng] 41-3625
- Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] 41-3742
- Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, [1986, 136p., rus] 41-3805
- Calculation of ice volume of some mountain glaciers. Bakov, E.K., [1986, p.3-11, rus] 41-3806
- First glaciological expedition to West Kunlun Mountains 1983. Watanabe, O., et al, [1987, p.77-84, eng] 41-3918
- Modern glaciers on the south slope of West Kunlun Mountains. Zhang, Z., et al, [1987, p.85-91, eng] 41-3919
- Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124
- Analysis and computation of regimes of major mountain glacier systems. Krenke, A.N., [1986, p.4-9, 125-130, rus] 41-4332
- Comparing glacio-hydrology of Swiss Alps and Tien Shan. Kang, E., [1986, p.9-18, 130-139, rus] 41-4333
- Influence of katabatic wind on snow and ice ablation. Ohata, T., [1986, p.25-29, 144-147, rus] 41-4335
- Heat balance components of Tuyukau Glacier at different atmospheric circulations. Golovkova, R.G., et al, [1986, p.29-34, 148-152, rus] 41-4336
- Runoff in basins with variable extent of glaciation. Oertel, H., et al, [1986, p.59-64, 173-178, rus] 41-4341
- Modeling runoff from Vernagtferner, Austria. Escher-Vetter, H., et al, [1986, p.65-69, 178-182, rus] 41-4342
- Calculating runoff hydrograph for the Marukh mountain-glacier basin, Caucasus. Balaeva, V.A., et al, [1986, p.69-74, 182-186, rus] 41-4343
- Forecasting glacial runoff in river basins of Central Asia. Konovalov, V.G., [1986, p.75-78, 187-191, rus] 41-4344
- Variations in mountain river runoff related to climatic changes. Semenov, V.A., et al, [1986, p.78-82, 191-195, rus] 41-4345
- Role of major floods in glacier basins. Johnson, P.G., et al, [1986, p.82-87, 195-200, rus] 41-4346
- Possible mechanism of surges originating in bodies of pulsating glaciers. Kazanaki, A.B., [1986, p.87-92, 200-205, rus] 41-4347
- Modeling glacier surges and climatically induced fluctuations. Mazo, V.B., et al, [1986, p.97-102, 210-214, rus] 41-4349
- Engineering protection of mountainous regions from dangerous glacial processes. Grakovich, V.F., et al, [1986, p.102-104, 214-216, rus] 41-4350
- Ice volumes on Cascade volcanoes. Driedger, C.L., et al, [1986, 28p., eng] 41-4638
- Mountain soils**
- Studying soils and ground in the central BAM area. Vasilenko, N.G., et al, [1986, p.104-118, rus] 41-425
- Human activities impact on the biological activity of mountain soils. Aseeva, I.V., et al, [1986, p.41-45, rus] 41-456
- Scheme for predicting flood runoff for unstudied rivers of Eastern Siberia. Petenkov, A.V., [1986, p.37-45, rus] 41-599
- Meltwater streams as the cause of soil erosion. Mkrtchian, G.P., [1986, p.108-114, rus] 41-814
- Differentiation in forest conditions of mountain regions and phytocenotic productivity. Ziganshin, R.A., [1984, p.78-87, rus] 41-1081
- Development of taiga forests. Savina, L.N., [1986, 189p., rus] 41-2258
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] 41-2289
- Remote sensing in the study of elements of moisture supply to geosystems. Grin, A.M., ed, [1986, 113p., rus] 41-2732
- Modeling meltwater runoff in mountain catchment areas from satellite data. Muzylev, E.L., et al, [1986, p.16-29, rus] 41-2733
- Calculating runoff formation in catchment areas from remote sensing data. Kulikov, I.U.N., et al, [1986, p.30-36, rus] 41-2734
- Brio-lichenologic investigations in the USSR. Shliakov, R.N., ed, [1986, 118p., rus] 41-2775
- Briophyta in the Polar-Alpine Botanical Garden. Konstantinova, N.A., et al, [1986, p.8-12, rus] 41-2776
- Lichens in western Chukot highlands (Paliavaam River). Makarova, I.I., [1986, p.105-108, rus] 41-2778
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilimbaev experimental forest taken as an example). Zubareva, R.S., ed, [1986, 158p., rus] 41-2873
- Soil cover of the Bilimbaev model forest. Firsova, V.P., et al, [1986, p.45-72, rus] 41-2875
- Natural revegetation of subpolar mountain areas affected by industry. Martynenko, V.A., [1986, p.1663-1668, rus] 41-3026
- Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains. Severskiĭ, I.V., et al, [1986, p.29-38, rus] 41-3484
- Problems of origin and geography of soils. Liverovskii, I.U.A., [1987, 248p., rus] 41-4555
- Microorganisms found in Alpine soils, snow cover and streams. Dobrovol'skaia, N.G., et al, [1985, p.77-81, rus] 41-4562
- Mountain tundra**
- See: Alpine tundra
- Mountains**
- Peculiarities of water balance structure in different landscapes of Priangara. Berkin, N.S., et al, [1986, p.187-193, rus] 41-1375
- Mechanized laying of communication cables under difficult conditions. Kuz'menko, V.V., et al, [1987, 161p., rus] 41-3609
- Outline of the studies on the system of snow-melt of the Joetsu-Shinkansen. Nakamata, S., [1985, p.1-6, jpn] 41-4584
- Mud**
- Water and bottom muds in reserve pits, Alaska. Pollen, M.R., [1986, 164p. + append., eng] 41-2451
- Mud circulation**
- See: Drilling fluids
- Mudflows**
- Calculation and prediction of the regime and distribution of mountain glaciers. Tokmagambetov, G.A., et al, [1985, 159p., rus] 41-518
- Engineering-geological observation polygons for studies and control of human factors impact on the development of exogenic processes. Niazov, R.A., [1986, p.70-79, rus] 41-602
- Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed, [1984, 110p., rus] 41-721
- Types of mudflows and danger areas in the Kirghiz Range. Bobushev, T.S., [1984, p.35-41, rus] 41-725
- Snow physics, avalanches, mudflows. Bolov, V.R., ed, [1985, 108p., rus] 41-836
- Mudflow-hazard areas of northern Caucasus. Gerasimov, V.A., [1985, p.39-46, rus] 41-843
- Distribution regularities of mudflow foci in the Chechen-Ingush ASSR. Streshneva, N.P., [1985, p.46-58, rus] 41-844
- Mudflow formation and transformation processes in the Gerkhozhanu River basin. Dokukin, M.D., [1985, p.58-71, rus] 41-845
- Impact strength of mudflow mass on transverse structures. Kukhalashvili, E.G., et al, [1985, p.356-360, rus] 41-1623
- Calculating the ultimate balance of a mudflow mass. Kukhalashvili, E.G., et al, [1985, p.373-376, rus] 41-1625
- Results of laboratory investigations of newly designed mudflow control structures of semi-cylindrical form. Gavardashvili, G.V., [1986, p.169-171, rus] 41-1626
- Conditions conducive to glacial mudflow in the Aktru River valley, Altai Mountains, June 24, 1984. Barashkova, N.K., et al, [1986, p.121-124, rus] 41-1651
- Methods of calculating mudflow characteristics. Vinogradov, I.U.B., [1985, p.83-89, rus] 41-2730
- Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains. Severskiĭ, I.V., et al, [1986, p.29-38, rus] 41-3484
- Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, [1986, 136p., rus] 41-3805
- Permafrost distribution and slope processes in central Tien Shan. Tarakanov, A.G., [1986, p.98-109, rus] 41-3807
- Municipal engineering**
- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] 41-2919
- Construction of the Novosibirsk subway under severe climatic conditions. Romanov, V., et al, [1986, p.7-9, rus] 41-3738
- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., [1987, 208p., rus] 41-3804
- Muskeg**
- Evaluation of road construction by surcharge over muskeg. Johnson, E.G., [1982, 13p. + append., eng] 41-3048
- Naleds**
- Naled ice growth. Schohl, G.A., et al, [1986, 187p., eng] 41-80
- Characteristics of naled fields. Sokolov, B.L., [1986, p.138-147, rus] 41-123
- Naleds, river ice covers and winter drainage in permafrost areas. Kravchenko, V.V., [1986, p.34-84, rus] 41-423
- Prevention of naled formation on Kirghizian mountain roads. Turgunbaev, A.T., [1985, p.26-27, rus] 41-504
- Passing spring meltwater when pipes are clogged by naleds. Dement'ev, V.A., [1986, p.16-17, rus] 41-511
- Theory and laboratory observations of naled ice growth. Schohl, G.A., et al, [1986, p.168-177, eng] 41-676
- All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd. Novosibirsk, 1984. Proceedings, [1985, 126p., rus] 41-1362
- Ground water level rise in Siberia and the Far North and East. Gospodinov, D.G., [1985, p.27-33, rus] 41-1363
- Some modeling problems related to the theory of naleds. Dement'eva, O.V., [1982, p.162-165, rus] 41-1443
- Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al, [1986, p.37-49, rus] 41-1537
- Cartographic problems of applied glaciology. Alekseev, V.R., [1986, p.144-146, rus] 41-1657
- Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al, [1986, p.199-228, rus] 41-1668
- Technical schemes for melting natural ice for water-supply systems. Vdovin, I.U.I., [1986, p.189-193, rus] 41-2176
- Naled ice growth. Schohl, G.A., [1986, 205p., eng] 41-2589
- Naleds of the northern Yenisey River area. Rivkin, F.M., [1986, p.132-138, rus] 41-2830
- Waters in active layers and naled formation. Poznanin, V.L., [1986, p.142-147, rus] 41-2832
- Using dry, low-cement concretes in permafrost areas. Zait'sman, O.M., et al, [1986, p.31-35, rus] 41-2867
- Satellite methods of studying naleds and ground waters of eastern Pamir. Topchiev, A.G., [1986, p.48-58, rus] 41-3391
- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed, [1986, 192p., rus] 41-3513
- Ground water naleds, central BAM. Deikin, B.N., et al, [1986, p.86-94, rus] 41-3520
- Satellite methods of studying naleds. Abakumenko, A.E., [1986, p.94-99, rus] 41-3521
- Natural gas**
- Alaskan atmospheric methane sources. Sebacher, D.I., et al, [1986, p.1-10, eng] 41-1259
- Interaction between cryolithozone and natural gases of the underground hydrosphere. Romanovskii, N.N., [1986, p.3-17, rus] 41-2543
- Scientific-technical preparation for economic development of Yamal Peninsula. [1987, p.31-34, rus] 41-2784
- Man, sea, technology. Narusbaev, A.A., ed, [1987, 335p., rus] 41-4145
- Ships used in the exploitation of offshore deposits. Gorshel'nik, K., et al, [1987, p.221-231, rus] 41-4147
- Natural resources**
- Arctic offshore—a challenge to the technical sciences. Kostilainen, V., [1986, p.4-7, eng] 41-84
- Problems of developing natural resources in the northern Urals. Pakhomov, V.P., ed, [1985, 72p., rus] 41-203

## Natural resources (cont.)

- Some aspects of economic development of northern regions. Loginov, V.G., [1985, p.15-21, rus] 41-205
- Task economic complexes in northern regions. Maslennikov, V.V., [1985, p.28-32, rus] 41-206
- Construction of mineral raw materials bases in northern mountains. Pakhomov, V.P., et al, [1985, p.39-45, rus] 41-208
- USSR energy atlas. [1985, 79p., eng] 41-480
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] 41-571
- Seventh continent; Antarctica in a resource age. Shapley, D., [1985, 315p., eng] 41-649
- Northern Oil and Gas Action Program (NOGAP) bibliography, Volume 1. [1986, 51p., eng] 41-696
- Scientific polar research in the Arctic and Antarctica. Thorén, R., [1986, 43p., eng] 41-787
- Catalog of microfiche of Alaska natural resources and environment. [1986, 167p., eng] 41-965
- Arctic research in the national interest. Washburn, A.L., et al, [1986, p.633-639, eng] 41-1033
- Acoustic navigation in research and production situations. Hakala, H., [1986, p.145-161, eng] 41-1094
- The living Earth. Agriculture and natural resources. Ushakov, S.A., ed, [1986, 167p., rus] 41-1163
- Northern Information Networking Conference. Final report. Cote, D., ed, [1986, 83p., eng] 41-1567
- NANA region environment, a summary of available information. Hale, L.Z., [1979, 14p. + plates, eng] 41-1781
- Development of power engineering in the Yakut ASSR related to the Baykal Amur Railroad construction. Collection of scientific papers. Petrov, N.A., ed, [1985, 101p., rus] 41-1925
- Ice island lab shows petroleum potential. Jackson, R., [1986, p.1-4, eng] 41-2198
- National needs and Arctic research. [1986, 24p., eng] 41-2216
- Water resources of the BAM zone. Sokolov, A.A., [1986, 166p. (pertinent p.146-151), rus] 41-2228
- Development of Canadian frontier regions. Pallister, A.E., et al, [1986, p.36-63, eng] 41-2265
- Hydrocarbons and future exploitation in Norwegian and Barents Seas. Bergsager, E., [1986, p.64-93, eng] 41-2266
- Hydrocarbon activities in Greenland. Christensen, M., [1986, p.94-110, eng] 41-2267
- Arctic logistics and supporting services. Westerberg, T., et al, [1986, 16p., eng] 41-2283
- Impact of offshore permafrost on oil and gas production. Graham, C.A., [1986, p.35-47, eng] 41-2512
- Australia, Britain, and Antarctica. Millar, T.B., ed, [1986, 111p., eng] 41-2597
- U.S.-Canadian cooperation in the Arctic. Friedheim, R.L., [1986, p.360-367, eng] 41-2692
- Availability of mineral resources in the Antarctic. Roland, N.W., [1986, p.154-163, ger] 41-2921
- Exploration and economic evaluation of petroleum deposits in subarctic regions. D'achkova, E.A., [1987, 108p., rus] 41-2961
- Ice engineering: research after the rush. Ettema, R., et al, [1987, p.(A)22-(A)33, eng] 41-3353
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] 41-3433
- NOAA Information Services for U.S. Arctic Marine Operations. [1986, 77p., eng] 41-3508
- Transportation in regions of new economic development. Prokof'eva, T.A., et al, [1986, 208p., rus] 41-3663
- Conference of geologists from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987, summaries of reports, Vol.1. [1986, 166p., rus] 41-3982
- Navigation**
- Acoustic navigation in research and production situations. Hakala, H., [1986, p.145-161, eng] 41-1094
- Processing gravity data using *Shiras* navigational information. Segawa, J., et al, [1986, p.13-18, eng] 41-1470
- Rules for the classification and construction of sea-going ships. [1986, 680p., eng] 41-1682
- On the Yukon and Tanana: river trip was "no picnic". Staley, C., [1985, p.8-9, eng] 41-1837
- Air services support to northern operators. Davidson, D., [1986, p.279-294, eng] 41-2032
- Scheduled Arctic helicopter operations. Oxholm, O., [1986, p.295-320, eng] 41-2033
- Development of helicopter operational capabilities in the Arctic. Wolfe-Milner, T., [1986, p.336-351, eng] 41-2034
- Air/ground transportation in Antarctic logistics support. Baker, M.J., et al, [1986, p.376-419, eng] 41-2037
- Aircraft support of research in Antarctica. Bresnahan, D.M., [1986, p.473-494, eng] 41-2040
- Experiences with High Arctic offstrip aircraft operations. Doyle, P., [1986, p.495-511, eng] 41-2041
- Effects of simulated ice on the performance of an airfoil. Zaguli, R.J., et al, [1984, 183p., eng] 41-3255
- Year-round navigation effect on arctic mooring structures. Budin, A.I.A., et al, [1986, p.142-150, rus] 41-3457
- See also: Ice navigation; Subglacial navigation
- Nepal**
- Khumbu Glacier**
- Supraglacial debris on the Khumbu Glacier, Nepal. Nakawo, M., et al, [1986, p.129-131, eng] 41-754
- Topography in the ablation area of the Khumbu Glacier, Nepal. Watanabe, O., et al, [1986, p.177-180, eng] 41-765
- Yala Glacier**
- Tritium content of water flowing from Yala Glacier. Kamiyama, K., et al, [1986, p.11,841-11,844, eng] 41-1856
- Neutron diffraction**
- Structure of high-density amorphous ice by neutron diffraction. Floriano, M.A., et al, [1986, p.3062-3064, eng] 41-2240
- Neutron scattering**
- Neutron scattering of supercooled water in silica gels. Poinson, C., et al, [1986, p.3447-3459, eng] 41-2479
- New Zealand**
- Craigieburn Range**
- Plant ecology at the alpine timberline, New Zealand. Norton, D.A., et al, [1984, p.361-370, eng] 41-1236
- Otago Mountains**
- Weathering pit development, Otago Mts., New Zealand. Fahey, B.D., [1986, p.337-347, eng] 41-1181
- Nival relief**
- Nival-glacial relief-forming processes in the BAM zone. Plastinin, L.A., et al, [1986, p.82-86, rus] 41-3519
- Nivation**
- Experience in compiling and using complex engineering glaciological maps. Osokin, N.I., et al, [1986, p.213-219, rus] 41-137
- Plants in the Anadyr' River basin. Korobkov, A.A., et al, [1986, p.450-459, rus] 41-989
- Plant distribution in nival communities of the Chukotskiy Peninsula. Razzhivin, V.I.U., [1986, p.1088-1097, rus] 41-1456
- Recent glaciation of the Pekul'ney Range. Sedov, R.V., et al, [1986, p.128-130, rus] 41-1653
- Nivation and local glaciation in N. and S. Sweden. A progress report. Rapp, A., et al, [1986, p.197-205, eng] 41-1878
- Freeze thaw activity at snowpatch sites. Nyberg, R., [1986, p.207-211, eng] 41-1879
- Classification of exogenic relief-forming processes on land. Vyrkin, V.B., [1986, p.20-24, rus] 41-2247
- Nival-glacial relief-forming processes in the BAM zone. Plastinin, L.A., et al, [1986, p.82-86, rus] 41-3519
- Noise (sound)**
- Model studies of surface noise interference in ground-probing radar. Arcone, S.A., et al, [1985, 23p., eng] 41-447
- Nearfield noise measurements from an Arctic pressure ridge. Buck, B.M., et al, [1986, p.256-264, eng] 41-1029
- Winter maintenance of roads. Popp, C., [1986, p.536-540, ger] 41-2324
- Underwater noise due to rain, hail, and snow. Scrimger, J.A., et al, [1987, p.79-86, eng] 41-2332
- Characterization of Arctic undersea noise. Veitch, J.G., et al, [1983, 28p. + figs., eng] 41-3382
- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed, [1986, 120p., rus] 41-3385
- Noise and vibration of motorships in thick ice cover. Zinchenko, V.I., et al, [1986, p.48-63, rus] 41-3390
- Nomenclature**
- See: Terminology
- Nomographs**
- Nomographs for meltwater determination. Ambach, W., et al, [1986, p.181-189, eng] 41-4357
- Nomographs for the determination of meltwater from snow and ice sur. Ambach, W., [1986, p.7-15, eng] 41-4358
- Northern Sea Route**
- Experimental ice navigation of diesel ship. Burkov, G., et al, [1986, p.42-45, rus] 41-3204
- Northwest Passage**
- Management of Arctic marine transportation: a Canadian perspective. McRae, D.M., [1986, p.350-359, eng] 41-2691
- U.S.-Canadian cooperation in the Arctic. Friedheim, R.L., [1986, p.360-367, eng] 41-2692
- Norway**
- Polar technology—ice engineering. [1986, c10p., eng] 41-368
- Relative dating of Neoglacial moraine ridges in North Norway. Innes, J.L., [1984, p.53-63, eng] 41-625
- Glacier mapping to confirm results from mass-balance measurements. Haakensen, N., [1986, p.73-77, eng] 41-742
- Repeated glacier mapping for hydrological purposes: water power planning. Östrem, G., [1986, p.135-140, eng] 41-756
- Radio echo-sounding on Jostedalbreen, Norway. Saetrap, A.C., et al, [1986, p.156-158, eng] 41-760
- Arctic-alpine soils, southern Norway. Mellor, A., [1986, p.327-336, eng] 41-1180
- Low pressure weather systems in and around Norwegian waters. Bilello, M.A., [1986, p.53-66, eng] 41-1799
- Predicted hazard area for a polar low. Eidsvik, K.J., [1986, p.273-277, eng] 41-1810
- Morphoclimatic aspects of periglacial features, northern Scandinavia. Svensson, H., [1986, p.123-130, eng] 41-1870
- Zonation and ecology of high mountain permafrost in Scandinavia. King, L., [1986, p.131-139, eng] 41-1871
- Challenging concept in road construction: superlight fill materials. Frydenlund, T.E., [1986, p.11-14, eng] 41-2260
- Hydrocarbons and future exploitation in Norwegian and Barents Seas. Bergsager, E., [1986, p.64-93, eng] 41-2266
- Esso—SINTEF Norwegian Arctic Research Program. Setchfield, T.L., [1986, p.167-178, eng] 41-2272
- Iceberg scouring and its effect on seabed, Norwegian shelf. Lien, R., [1986, p.87-96, eng] 41-3096
- Sedimentation in a glacier lake. Östrem, G., et al, [1987, p.123-1-8, eng] 41-3556
- Austerdalsisen Glacier**
- Recent changes in a calving glacier, Austerdalsisen, Svartisen, Norway. Theakstone, W.H., et al, [1986, p.303-316, eng] 41-3562
- Jotunheimen**
- Moraine ridge deposition on Boverfreen glacial foreland. Gallagher, J., [1985, p.61-73, eng] 41-585
- Nature of origin of earth hummocks, Breisterdalen, Jotunheimen/Norway. Bolster, S.J.S., [1985, p.94-115, eng] 41-586
- Lyngen Alps**
- Movement on the ice fro. Gellatly, A., et al, [1986, p.294-299, eng] 41-1512
- Midtre Fjellfonna**
- Comparison of glacier maps—a source of climatological information. Östrem, G., et al, [1986, p.225-231, eng] 41-1881
- Nigardsbreen**
- Dating of the Little Ice Age glacier advance, SW Norway. Matthews, J.A., et al, [1986, p.369-375, eng] 41-2472
- Nordautlandet**
- Digital mapping in polar regions from Landsat photographic products: a case study. Dowdeswell, J.A., et al, [1986, p.47-50, eng] 41-737
- Mapping of the Nordautlandet ice caps. Dowdeswell, J.A., et al, [1986, p.51-58, eng] 41-738
- Spitsbergen**
- Glaciation of Nordenskiöld Land, W. Spitsbergen. Musial, A., [1985, p.497-513, eng] 41-74
- Evolution of marginal zone of the Vitkovski Glacier (South Spitsbergen). Andrzejewski, L., et al, [1985, p.527-535, eng] 41-75
- Hydrologic investigations in the Mimer River basin (Spitsbergen) in 1983. Gokhman, V.V., et al, [1986, p.161-166, rus] 41-127
- Accumulation of airborne trace pollutants by arctic plants and soil. Thomas, W., [1986, p.47-57, eng] 41-344
- Deflation and nival eolian phenomena near a glacier, SW Spitsbergen. Migala, K., et al, [1986, p.197-206, eng] 41-635
- Dynamics of periglacial sorted circles in western Spitsbergen. Hallet, B., et al, [1986, p.81-99, eng] 41-792
- Stresses in the upper layer of the Hans Glacier, Spitsbergen. Cichowicz, A., [1986, p.13-19, eng] 41-1253
- Eolian processes in glaciers, SW Spitsbergen. Kida, J., [1986, p.25-43, eng] 41-1550
- Periglacial weathering of the mountain massifs, SW Spitsbergen. Martini, A., [1986, p.45-73, eng] 41-1551
- Present-day geomorphological processes on Prins Oscars Land, Svalbard. Rudberg, S., [1986, p.41-63, eng] 41-1845
- Dating slope deposits and estimating rates of rock wall retreat in Northwest Spitsbergen by lichenometry. André, M.F., [1986, p.65-75, eng] 41-1846
- Effect of bedrock on environments of Spitsbergen glaciers. Drozdowski, E., [1985, p.397-413, eng] 41-2192
- Geotechnical research focuses on permafrost. [1986, p.9-10, eng] 41-2976
- Hydrological investigations in the Mimer River basin, Svalbard, in 1983. Gokhman, V.V., et al, [1986, p.309-316, eng] 41-3622
- Glacial and periglacial geology of Spitsbergen, Svalbard. Rowan, D.E., [1981, 115p., eng] 41-3892
- Internal reflecting horizons in Spitsbergen glaciers. Bamber, J.L., [1988, p.5-10, eng] 41-4427
- Svalbard**
- Biogeographic evolution of a moraine sector in Svalbard. Brossard, T., [1985, p.33-46, fre] 41-371
- Vegetation of a high Arctic tundra, Svalbard. Nimis, P.L., [1985, p.47-58, eng] 41-372
- Soviet glaciological studies on the eastern ice field in 1984-1985. [1986, p.10-16, rus] 41-1633
- Climate and glaciation in Kong Karls Land, eastern Svalbard. Holmgren, B., et al, [1984, p.291-302, eng] 41-2007
- Lake sediments and deglaciation on Svalbard. Österholm, H., [1986, p.329-344, eng] 41-3564

- Radio echo soundings of sub-polar glaciers in Svalbard. Kotliakov, V.M., et al, [1987, p.151-159, eng] 41-4450
- Norwegian Sea**
- Norwegian Polar Lows Project. Lystad, M., [1986, p.1-16, eng] 41-1796
- Analysis of a polar low in the Norwegian Sea, 29 February-1 March 1984. Rabbe, A., [1986, p.91-103, eng] 41-1801
- Numerical simulations with an idealized model. Haugen, J.E., [1986, p.151-160, eng] 41-1803
- Simulation of polar lows in the Norwegian Sea. Grönås, S., [1986, p.201-220, eng] 41-1806
- Radar wave observations and the Norwegian Sea storm, Feb. 1984. Ross, D., et al, [1986, p.285-296, eng] 41-1811
- Nuclear magnetic resonance**
- Dynamical properties of ice surfaces studied by nuclear magnetic resonance. Mizuno, Y., et al, [1986, p.1-10, jpn] 41-3874
- Nuclear power**
- Naval power plants and equipment. Panin, I.U.I., ed, [1984, 153p., rus] 41-554
- Interactions of nuclear ship's propelling system with large ice floes. Basalygin, G.M., [1984, p.52-60, rus] 41-555
- Quarter of a century on ice watch. Leviakov, M., [1985, p.20-21, eng] 41-2938
- Nuclear icebreaker *Rositsa*. [1985, p.25-27, eng] 41-2939
- Sevmorput'* is launched. [1986, p.24-25, rus] 41-3203
- Nucleating agents**
- Heterogeneous nucleation of ice on aerosol nuclei with modified surfaces. Bazzaev, T.V., et al, [1986, p.119-128, rus] 41-1903
- Ice nucleating behaviour of PbI<sub>2</sub> in the presence of soluble salts. Gobinathan, R., et al, [1981, p.1527-1533, eng] 41-2255
- Ice nucleation activity of antarctic marine microorganisms. Parker, L.V., et al, [1985, p.126-128, eng] 41-2955
- Studies of ice-forming, properties of phloroglucinol under field conditions. Gromova, T.N., et al, [1986, p.116-123, rus] 41-3465
- Problems of cloud physics. Voloshchuk, N.I., ed, [1986, 249p., rus] 41-3669
- Numerical simulation of the evolution of seeded supercooled stratiform clouds. Bakhanov, V.P., et al, [1986, p.26-41, rus] 41-3670
- Microstructural characteristics of hailstone embryos. Tilov, M.I., et al, [1986, p.229-237, rus] 41-3672
- Investigation of ice-forming activity of aerosols of copper acetylacetonate in a supercooled two-phase flow. Kim, N.S., et al, [1986, p.21-24, eng] 41-3678
- Influence of water vapor depletion on ice nucleation of supercooled fog. Gorbunov, B.Z., et al, [1987, p.261-267, eng] 41-4362
- Ice crystal dynamics during ice nucleation of supercooled fog. Pashenko, A.E., et al, [1987, p.269-275, eng] 41-4363
- Nature of ice-forming nuclei in marine air masses. Rosinski, J., et al, [1987, p.291-309, eng] 41-4364
- See also: Lead iodide; Silver iodide
- Nucleation**
- Freezing and higher plants. Grout, B.W.W., [1986, p.203-207, eng] 41-2224
- Nucleation rate**
- Numerical simulation of orographic snowfall. Cotton, W.R., et al, [1986, p.1658-1680, eng] 41-2500
- Nuclei**
- See: Condensation nuclei; Freezing nuclei; Ice crystal nuclei; Ice nuclei; Organic nuclei; Snow crystal nuclei
- Numerical models**
- See: Mathematical models
- Nutrient cycle**
- Patterns of High Arctic saxifages. Grulke, N.E., et al, [1985, p.241-250, eng] 41-1245
- Antarctic stream ecosystems: variability in environmental properties and algal community structure. Howard-Williams, C., et al, [1986, p.511-544, eng] 41-1558
- Environmental control of nutrients in Alaskan tussock tundra. Chapin, F.S., III, et al, [1986, p.167-195, eng] 41-2189
- Nutrient fluxes during extended blooms of Arctic ice algae. Cota, G.F., et al, [1987, p.1951-1962, eng] 41-2254
- Effects of freezing on nitrite stability in aqueous solutions. Muneta, P., et al, [1987, p.22-23, eng] 41-2808
- Nitrogen in two contrasting antarctic bryophyte communities. Christie, P., [1987, p.73-93, eng] 41-3795
- Intracellular photosynthate allocation and the control of Arctic marine ice algal production. Smith, R.E.H., et al, [1987, p.124-132, eng] 41-3998
- Ocean atmosphere interactions**
- See: Air water interactions
- Ocean bottom**
- Evaluation of sea bottom ice scour models. Comfort, G., et al, [1986, 71p. + graphs, eng] 41-273
- Petroleum residues in the Canadian Arctic marine environment. Levy, E.M., [1986, p.161-169, eng] 41-352
- Laboratory soil testing for design of arctic offshore structures. Saada, A.S., et al, [1986, p.137-149, eng] 41-359
- Some factors influencing iceberg scour estimates. Prasad, K.S.R., et al, [1986, p.234-239, eng] 41-849
- Understanding the Arctic sea floor for engineering. [1982, 141p., eng] 41-893
- High latitude drilling in the ocean drilling program. Harding, B.W., et al, [1986, p.83-106, eng] 41-1092
- Controlling factors of ice-created sea floor features. Clark, J.I., et al, [1986, p.565-582, eng] 41-1118
- Ice-resistant offshore structures. Gershunov, E.M., [1986, p.605-623, eng] 41-1120
- Method for comparing and optimizing Arctic offshore structures. Korppoo, S., [1986, p.624-632, eng] 41-1121
- Canadian Beaufort Sea 1984 repetitive mapping of ice scour. Shearer, J., et al, [1986, 43p. + appends. + maps, eng] 41-1566
- Life and living conditions of the Barents Sea benthos. Matishov, G.G., ed, [1986, 220p., rus] 41-1901
- Ice island lab shows petroleum potential. Jackson, R., [1986, p.1-4, eng] 41-2198
- Concrete island under ice loading. Templeton, J.S., III, et al, [1987, p.33-40, eng] 41-2399
- Design of gravity structures under iceberg loading. Cheang, L.C., et al, [1987, p.55-62, eng] 41-2402
- Seafloor morphology and sediments. Pelletier, B.R., [1986, p.143-162, eng] 41-2595
- Circum-Arctic petroleum potential. Green, A.R., et al, [1986, p.101-130, eng] 41-2606
- Alaska: potential for giant fields. Hohler, J.J., et al, [1986, p.131-142, eng] 41-2607
- Oil and gas fields in the East Coast and Arctic basins of Canada. Menzies, R.A., [1986, p.143-176, eng] 41-2608
- Ice scour and seabed engineering. [1986, 322p., eng] 41-3086
- Marine pipeline design in ice environments. McKeehan, D.S., [1986, p.9-17, eng] 41-3087
- Ice-gauge studies, Alaskan Beaufort Sea. Barnes, P.W., et al, [1986, p.41-50, eng] 41-3090
- Relict ice scours on King William Island, N.W.T. Woodworth-Lynas, C.M.T., et al, [1986, p.64-72, eng] 41-3093
- Grand Bank pits: description and postulated origin. Barrie, J.V., et al, [1986, p.73-77, eng] 41-3094
- Iceberg scouring and its effect on seabed, Norwegian shelf. Lien, R., [1986, p.87-96, eng] 41-3096
- Review of deterministic ice-scour models. Comfort, G., et al, [1986, p.97-108, eng] 41-3097
- Iceberg-scour modelling at Memorial University of Newfoundland. Chari, T.R., [1986, p.109-117, eng] 41-3098
- Iceberg crater chains and scour up- and downslope. Baas, D., et al, [1986, p.122-128, eng] 41-3100
- Regional geology and seabed dynamics at the proposed iceberg scour (DIGS) experiment site. Josephans, H.W., [1986, p.132-137, eng] 41-3102
- Seabed response to ice forces: summary and discussion. Roggensack, W., et al, [1986, p.148-153, eng] 41-3105
- Ocean-bottom sea-ice scour: a computer-based data management system. Gilbert, G.R., et al, [1986, p.157-166, eng] 41-3106
- Beaufort Sea ice scour extreme depth and age. Shearer, J., et al, [1986, p.167-169, eng] 41-3107
- Regional ice-scour studies and data bases: issues and concerns. Blasco, S.M., [1986, p.206-209, eng] 41-3112
- Estimating ice-scour frequency and risk to buried pipelines. Pilkington, R., [1986, p.213-220, eng] 41-3113
- Numerical model for iceberg grounding events. D'Apollonia, S.J., et al, [1986, p.221-232, eng] 41-3114
- Risk assessment for iceberg-scour damage: Labrador Sea and Grand Banks. Allan, D., [1986, p.240-248, eng] 41-3116
- Populations of iceberg scour depths. Gaskill, H., [1986, p.249-258, eng] 41-3117
- Preliminary simulation of the formation and infilling of sea ice gouges. Weeks, W.F., et al, [1986, p.259-268, eng] 41-3118
- Towards repetitive mapping of ice scours in the Beaufort Sea. Shearer, J., et al, [1986, p.284-286, eng] 41-3120
- Design of a repetitive-mapping network for ice scour: east coast. Hodgson, G.J., [1986, p.287-292, eng] 41-3121
- Analysis of potential slope instability due to wave loading on the Nova Scotian shelf. Moran, K., et al, [1986, p.980-999, eng] 41-3171
- Torsional resistance of a single pile in a layered soil. Hache, R.A.G., et al, [1986, p.1004-1019, eng] 41-3172
- Iceberg scouring: hazard for seabed development. Lewis, C.F.M., et al, [1986, p.1020-1021, eng] 41-3173
- Iceberg scour mapping for the Canadian East Coast. Lewis, C.F.M., [1987, 45p. + maps, eng] 41-3225
- Iceberg scouring rate studies, Grand Banks of Newfoundland. Lewis, C.F.M., et al, [1987, p.825-833, eng] 41-4013
- Iceberg scouring off SE Baffin Island. Praeg, D., et al, [1987, p.847-857, eng] 41-4014
- Seismic survey of the Arctic island channels using open water leads. Sonnichsen, G.V., et al, [1987, p.877-882, eng] 41-4015
- Cone penetration tests of the sediments off Richards I., N.W.T. Kurfurst, P.J., [1987, p.939-944, eng] 41-4018
- Newly formed ice gouges in Harrison Bay, Alaska. Rearic, D.M., [1986, 52p., eng] 41-4107
- Seafloor stability study, inner Scotian Shelf. Judge, J.T., et al, [1987, 80p., eng] 41-4531
- Limit state probabilistic design of offshore Arctic pipelines. Row, D.G., et al, [1987, p.115-123, eng] 41-4632
- Arctic dredge spread. Machemehl, J.L., [1987, p.125-130, eng] 41-4633
- Ocean currents**
- Influence of atmospheric circulation on sea ice conditions. Aleksandrov, E.I., et al, [1986, p.118-122, rus] 41-118
- Numerical study of sea ice and ocean circulation in the Arctic. Semner, A.J., Jr., [1986, p.189-224, eng] 41-149
- Research priorities in Canadian waters. Goddins, D.O., [1986, p.295-332, eng] 41-251
- Ice drift tracing of water circulation in the Arctic. Kuzmina, N.P., et al, [1984, p.20-32, eng] 41-818
- Data sensitivities of sea ice drift and ocean stress. Walsh, J.E., et al, [1986, p.11657-11675, eng] 41-1023
- Ice-ocean modelling in the East Greenland area. Rasmussen, E.B., et al, [1986, p.380-398, eng] 41-1108
- East Greenland Current—ice studies. Tryde, P., [1986, p.129-136, eng] 41-1588
- Studying anomalously high ice drift velocities in Arctic seas. Kuznetsov, I.M., et al, [1986, p.57-60, eng] 41-1691
- Analysis of NavSat buoy data, Beaufort Sea, 1980—program listings. [1981, 66p., eng] 41-1766
- Conceptual oil dispersion modeling, lower Cook Inlet-Shelikof Strait. Schleuter, R.S., et al, [1984, p.389-469, eng] 41-1783
- Water stress and currents under sea ice. Shirasawa, K., [1986, p.14,305-14,316, eng] 41-1858
- Ice-edge eddies in the Fram Strait marginal ice zone. Johannessen, O.M., et al, [1987, p.427-429, eng] 41-2802
- Remote sensing of the Fram Strait marginal ice zone. Shuchman, R.A., et al, [1987, p.429-431, eng] 41-2803
- Mesoscale oceanographic processes beneath the ice of Fram Strait. Manley, T.O., et al, [1987, p.432-434, eng] 41-2804
- Circulation and mixing in ice-covered waters. Carmack, E.C., [1986, p.641-712, eng] 41-2996
- 1984-1985 current observations in the East Greenland Current: a preliminary description. Muench, R.D., et al, [1986, p.41-53, eng] 41-3058
- Bottom topography effect on ice flow, barotropic flow and baroclinic flow. Hakkinen, S., [1987, p.3807-3820, eng] 41-3062
- Effect of sub-ice mesoscale features within the marginal ice zone of Fram Strait. Manley, T.O., [1987, p.3944-3960, eng] 41-3063
- Iceberg scouring on Saglek Bank, northern Labrador Shelf. Todd, B.J., [1986, p.182-193, eng] 41-3109
- Comparison of boundary layer model with turbulent boundary layer. Myrhaug, D., [1987, p.135-148, eng] 41-3135
- Boundary layer measurements and sand transport prediction, Scotian shelf. Hodgins, D.O., et al, [1986, 114p. + appends, eng] 41-3189
- Studies of ice-edge zones of Arctic seas. Nikolaev, I.U.V., et al, [1986, p.131-138, eng] 41-3264
- West Spitsbergen current and adjacent waters in Fram Strait. Weigel, A.M., [1987, 98p., eng] 41-3306
- On the response of the fjord Gullmaren under ice cover. Djurfeldt, L., [1987, p.1557-5167, eng] 41-3345
- Beaufort Sea coastal currents: a divergence near Barter Island, Alaska? Barnes, P.W., et al, [1987, p.139-142, eng] 41-3468
- Water masses and currents of the southern ocean. Whitworth, T., III, et al, [1987, p.6462-6476, eng] 41-3641
- Analytical model for ice-edge upwelling. Van Heijst, G.J.F., [1984, p.155-177, eng] 41-3790
- Basic components of chemical balance of the Arctic Ocean. Rusanov, V.P., [1986, p.40-51, rus] 41-4195
- Ice movement in the Arctic Ocean according to the FGGE Buys. Gorbunov, I.U.A., et al, [1986, 96-103, rus] 41-4202
- Diagnostic ice-ocean model. Hibler, W.D., III, et al, [1987, p.987-1015, eng] 41-4208
- Large-scale oceanography in Fram Strait during the 1984 Marginal Ice Zone Experiment. Quadfasel, D., et al, [1987, p.6719-6728, eng] 41-4232
- Circulation and water masses of the East Greenland shelf. Bourke, R.H., et al, [1987, p.6729-6740, eng] 41-4233
- Current regimes across the East Greenland polar front, summer 1984. Manley, T.O., et al, [1987, p.6741-6753, eng] 41-4234

## Ocean currents (cont.)

- Eddies in the Fram Strait marginal ice zone, 1983 and 1984. Johannessen, J.A., et al, [1987, p.6754-6772, eng] 41-4235
- Eddy near the Molloy Deep revisited. Bourke, R.H., et al, [1987, p.6773-6776, eng] 41-4236
- Biomass in the marginal ice zone of the Fram Strait, summer 1984. Smith, W.O., Jr., et al, [1987, p.6777-6786, eng] 41-4237
- Acoustic propagation through an ice edge eddy, eastern Greenland Sea. Mellberg, L.E., et al, [1987, p.6857-6868, eng] 41-4243
- Tomographic resolution of mesoscale eddies in the marginal ice zone: a preliminary study. Chiu, C.-S., et al, [1987, p.6886-6902, eng] 41-4245
- Turbulent transfer in a stratified oceanic boundary layer. McPhee, M.G., [1987, p.6977-6986, eng] 41-4254
- Northward flow in the Bering and Chukchi seas. Overland, J.E., et al, [1987, p.7097-7105, eng] 41-4264

- Sea ice drift near Bering Strait during 1982. Pease, C.H., et al, [1987, p.7107-7126, eng] 41-4265
- Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., [1987, p.134-146, eng] 41-4278
- Effect of divergence on ice redistribution in the Arctic Ocean, revealed by space imagery analysis. Nazirov, M., [1987, p.30-36, rus] 41-4618

## See also: Tidal currents

## Ocean environments

- Drilling mud usage and discharge in the Arctic Ocean, 1978-1982. Evance, T.B., comp, [1985, 6p. + appends., eng] 41-596
- Use and disposal of drilling fluids in the Arctic Ocean, 1983. Milburn, D., et al, [1986, 38p., eng] 41-597
- Use and disposal of drilling fluids in the Arctic Ocean, 1984. Milburn, D., et al, [1986, 47p., eng] 41-598
- Benthonic foraminifera from Baffin I. fiord environments. Schafer, C.T., et al, [1986, p.232-239, eng] 41-1867
- Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al, [1986, 63p., rus] 41-2362
- All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. [1986, 268p., rus] 41-2384
- Recent trends in studying the ecology of Polar seas of the Arctic. Matishov, G.G., [1986, p.1-5, rus] 41-2385
- Peculiarities of ecosystems distribution in the Barents Sea. Golikov, A.N., et al, [1986, p.7-8, rus] 41-2386
- Ecologic problems of protecting living organisms in northern seas. Matishov, G.G., et al, [1986, p.13-16, rus] 41-2387
- Modification of bottle bathometer for studying bacterioplankton at shallow depths. Balta, V.A., [1986, p.53-55, rus] 41-2389
- Experiments with joint action of vermiculite-based sorbents and the Barents Sea strains of petroleum oxidizing bacteria. Krasnikova, T.I., et al, [1986, p.178-180, rus] 41-2391
- Analysis of oil pollution in arctic seas, using biotechnological methods. Levchenko, A.B., et al, [1986, p.180-181, rus] 41-2392
- Scientific problems and basic results of the "Kosmos-1500" experiment. Afanas'ev, I.U.A., et al, [1986, p.4-20, rus] 41-2715
- Ocean development and management in the Arctic by USA and Canada. Vanderzwaag, D.L., et al, [1986, p.327-337, eng] 41-2724
- Jurisdiction and management of Arctic marine transportation. Westermeyer, W.E., et al, [1986, p.338-349, eng] 41-2725
- Arctic Heritage Symposium, Banff, Alta., 1985. [1987, 653p., eng] 41-3232
- Marine processes. Baker, J.M., et al, [1987, p.50-74, eng] 41-3233
- Natural associations of the Arctic and their protection. Korotkevich, E.S., ed, [1986, 120p., rus] 41-3860
- Protected territories of the North. Uspenskii, S.M., et al, [1986, p.18-24, rus] 41-3862

## Ocean waves

- Behaviour of ice masses in waves. Kokkinowrachos, K., et al, [1986, p.340-357, eng] 41-1105
- Wind/wave tank tests of drifting iceberg models. McTaggart, K.A., et al, [1986, p.364-379, eng] 41-1107
- Test cone project. Mäkitäinen, M., [1986, p.749-761, eng] 41-1130
- Outer Continental Shelf Environmental Assessment Program: Final reports of principal investigators, Vol.39. [1986, 360p., eng] 41-1785
- Ocean wave phenomena observed with an adaptive multifrequency radar system. Gjessing, D.T., et al, [1986, p.311-327, eng] 41-1813
- Environmental conditions under polar lows. Houbm, O.G., et al, [1986, p.343-357, eng] 41-1815
- Observations of internal gravity waves under the Arctic pack ice. Levine, M.D., et al, [1987, p.779-782, eng] 41-2327
- Seasonal ice zone. Wadhams, P., [1986, p.825-991, eng] 41-3000
- Internal waves in the Arctic Ocean: a review. Morison, J., [1986, p.1163-1183, eng] 41-3005

## Short term motion analysis of icebergs in linear waves.

- Arunachalam, V.M., et al, [1987, p.247-258, eng] 41-3036
- Wave growth in scattered sea-ice. Masson, D., et al, [1987, p.257-266, eng] 41-3167
- Analysis of potential slope instability due to wave loading on the Nova Scotian shelf. Moran, K., et al, [1986, p.980-999, eng] 41-3171
- Structure, internal waves and intrusions in the Greenland Sea ice edge zone. Foster, T.D., et al, [1987, p.6903-6910, eng] 41-4246
- High-frequency internal wave observations in the marginal ice zone. Sandven, S., et al, [1987, p.6911-6920, eng] 41-4247
- Ice floe collisions in the Greenland Sea, 1984. Martin, S., et al, [1987, p.7071-7084, eng] 41-4262
- Wave climate study, northern coast of British Columbia. [1987, 93p., eng] 41-4530
- Interaction of sea waves with discrete ice floes. Kobayashi, N., et al, [1987, 88p., eng] 41-4601

## Oceanographic ships

- Operation of German polar research and supply ship *Polarstern*. Müller, K., [1986, p.1523-1526, ger] 41-2195
- Ocean-atmosphere interactions and climatic changes in Northern Hemisphere. Nikolaev, I.U.V., ed, [1986, 163p., eng] 41-3262
- Studying sea-atmosphere interactions during the cold season. Bogorodskii, P.V., et al, [1986, p.151-157, eng] 41-3267

## Oceanographic surveys

- Geophysical exploration methods in the Arctic. Gaponenko, G.I., ed, [1978, 165p., rus] 41-998
- Aeromagnetic surveys in Arctic shelf seas. Palamarchuk, V.K., et al, [1978, p.129-133, rus] 41-1001
- Physical oceanography near the North Pole. Pounder, E.R., [1986, p.11,763-11,773, eng] 41-1025
- Using satellite data for calculating ocean-atmosphere heat transfer in the Newfoundland energy-active oceanic zone in winter. Rzhheplinskii, D.G., et al, [1986, p.32-41, rus] 41-1540
- Oceanographic cruise to Baffin Bay and Nares Strait, Sep. 1986. Bourke, R.H., [1986, 23p., eng] 41-2609

## Oceanography

- Ocean engineering and the environment—Oceans '85 Conference, Vol.1. [1985, 2 vols. (1364p.), eng] 41-2117
- Science program of the FRAM experiments in the Eastern Arctic Ocean. Baggercer, A.B., et al, [1985, p.420-428, eng] 41-221
- Automatic Arctic profiling system for oceanography under ice. Van Leer, J.C., [1985, p.433-436, eng] 41-223
- Arctic ice shelf growth, food oceanography and climate. Jeffries, M.O., et al, [1984, p.147-153, eng] 41-631
- Northern Workshop, 1st, 1984; proceedings and abstracts. [1986, 74p., eng] 41-1034
- Oceanographic cruise to the Greenland Sea, Sep. 1985. Bourke, R.H., et al, [1986, 32p., eng] 41-1547
- Beaufort Sea atlas. Mungall, C., [1986, p.10-11, eng] 41-2199

- Canadian inland seas. Martini, L.P., ed, [1986, 494p., eng] 41-2591
- Physical oceanography of Hudson Strait and Ungava Bay. Drinkwater, K.F., [1986, p.237-264, eng] 41-2596
- Upper ocean. McPhee, M.G., [1986, p.339-394, eng] 41-2990
- Circulation and mixing in ice-covered waters. Carmack, E.C., [1986, p.641-712, eng] 41-2996
- Ice Island underfoot. Chilingarov, A., et al, [1986, 175p., rus] 41-3250
- Oxygen-isotope composition in the ocean-glacier system. Nikolaev, V.I., et al, [1985, p.172-174, rus] 41-3538
- Proceedings of the Eighth Symposium on Polar Meteorology and Glaciology. Kawaguchi, S., ed, [1986, 113p., eng] 41-3653

- Future satellite systems for oceanic and cryospheric observations. Sherman, J.W., III, [1986, p.257-267, eng] 41-3987
- Marine meteorological and oceanographic products of the OPC. Feit, D.M., [1986, 105p., eng] 41-4156
- Soviet-American expedition "Weddell-POLEX-81", review. Gordon, A.L., [1986, p.27-37, rus] 41-1884
- Large-scale oceanography in Fram Strait during the 1984 Marginal Ice Zone Experiment. Quadfasel, D., et al, [1987, p.6719-6728, eng] 41-4232
- Mapping mesoscale ocean structure within the interior marginal ice zone. Manley, T.O., et al, [1987, p.6837-6842, eng] 41-4241
- Boundary layer, upper ocean, and ice observations in the Greenland Sea marginal ice zone. Morison, J.H., et al, [1987, p.6987-7011, eng] 41-4255
- Dynamics and thermodynamics of the ice-ocean system in the ice edge zone, Greenland Sea. McPhee, M.G., et al, [1987, p.7017-7031, eng] 41-4257
- Oceanographic influences on the sea ice cover in the Sea of Okhotsk. Gratz, A.J., et al, [1981, 18p., eng] 41-4327

## Oceans

- Model of Pleistocene glaciation of the system "glaciers-ocean-troposphere-asthenosphere". Karachenov, A.T., [1986, p.38-45, rus] 41-1635

## Estimating ocean-air heat fluxes during cold air outbreaks by satellite. Chou, S.-H., et al, [1981, 48p., eng] 41-2527

## Offshore drilling

- RR-3090—a drilling and production platform for the Arctic. [1986, p.8, eng] 41-85
- "Ross Rig" completed. Frekstad, P.A., [1986, p.58-59, eng] 41-92
- OMAE symposium on offshore and Arctic frontiers, 1st, 1986. [1986, 492p., eng] 41-354
- Caisson drilling and completion system. Hewlett, C., [1986, p.459-468, eng] 41-361
- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] 41-571
- Drilling mud usage and discharge in the Arctic Ocean, 1978-1982. Evance, T.B., comp, [1985, 6p. + appends., eng] 41-596
- Use and disposal of drilling fluids in the Arctic Ocean, 1983. Milburn, D., et al, [1986, 38p., eng] 41-597
- Offshore development in northern Canada and Alaska. Minion, R., comp, [1985, 83p., eng] 41-823
- Offshore and navigation conference, Helsinki, 1986; POLARTECH '86. [1986, 3 vols. + Suppls., eng] 41-1087

- Ice information systems for marine operations. Leppäranta, M., [1986, p.57-70, eng] 41-1090
- High latitude drilling in the ocean drilling program. Harding, B.W., et al, [1986, p.83-106, eng] 41-1092
- Integrated ice monitoring system for Arctic offshore drilling. Leavitt, E., et al, [1986, p.107-118, eng] 41-1093

- Arctic drilling/production unit anchored by tendons. Stewart, W.P., [1986, p.26-28, eng] 41-1223
- Offshore outlook: the American Arctic. Jahns, H.O., [1985, p.76-82, eng] 41-1328
- Self-lifting derrick towers for the Arctic. [1985, p.28-29, rus] 41-1515

- Cooperative construction of drilling assemblies. [1985, p.33, rus] 41-1516
- Drilling fluids and cuttings discharges in Alaska. Houghton, J.P., et al, [1984, p.1-388, eng] 41-1782
- Drilling rig transportation in the Canadian arctic islands. Baudais, D.J., et al, [1986, p.420-451, eng] 41-2038

- Ice management procedures for specialized drilling structures. Kimmerly, P.C., et al, [1986, p.764-791, eng] 41-2057
- Proceedings. [1978, 4 vols. (2653p.), eng] 41-2120
- Drilling offshore western Greenland—ice. Hammett, D.S., et al, [1978, p.119-128, eng] 41-2122

- First offshore drilling in the Beaufort Sea. Todd, M.B., [1978, p.399-405, eng] 41-2125
- Marine ice foundations for drilling rigs fixed at the bottom. Bogorodskii, V.V., et al, [1986, p.162-166, rus] 41-2171
- Scandinavian report. [1983, p.S1-S16, eng] 41-2226

- Development of Canadian frontier regions. Pallister, A.E., et al, [1986, p.36-63, eng] 41-2265
- Hydrocarbons and future exploitation in Norwegian and Barents Seas. Bergsager, E., [1986, p.64-93, eng] 41-2266
- Hydrocarbon activities in Greenland. Christensen, M., [1986, p.94-110, eng] 41-2267

- Future of sub-arctic and arctic offshore development in Canada. Matheson, J.R., [1986, p.149-159, eng] 41-2270
- Easo—SINTEF Norwegian Arctic Research Program. Setchfield, T.L., [1986, p.167-178, eng] 41-2272
- Ice data management for support of offshore operations. Terry, B.F., et al, [1986, p.195-222, eng] 41-2275

- General viewpoints on hydrocarbon developments in northern regions. Howard, M.W., [1986, p.317-323, eng] 41-2282
- Arctic logistics and supporting services. Westerberg, T., et al, [1986, 16p., eng] 41-2283
- SSDC/MAT—an international operation. [1987, p.3-5, eng] 41-2319

- International Offshore Mechanics and Arctic Engineering Symposium, 1987. [1987, 4 vols., eng] 41-2394
- Drilling of a well from a sprayed floating ice platform. Cape Allison C-47. Masterson, D.M., et al, [1987, p.9-16, eng] 41-2396
- Drilling and sampling offshore permafrost. Ruffell, J.P., [1986, p.11-15, eng] 41-2509

- Norman Wells Expansion Project—overview. Tibbatts, R.M., [1986, p.51-59, eng] 41-2514
- Portable hot water ice drill. Tucker, W.B., et al, [1986, p.549-564, eng] 41-2676
- Temperature regime of artificial ice-bearing earth structures. Savel'ev, B.A., et al, [1986, p.166-168, rus] 41-2836

- Geotechnical design for an arctic mobile offshore drilling unit. Hewitt, K.J., et al, [1986, p.956-979, eng] 41-3170
- Grounded ice island—field and laboratory research. Final report. Duthweiler, F.C., et al, [1976, 26p. + appends., eng] 41-3569
- Ships used in the exploitation of offshore deposits. Gorskelnik, K., et al, [1987, p.221-231, rus] 41-4147

## Offshore landforms

- Temperature regime of artificial ice-bearing earth structures. Savel'ev, B.A., et al, [1986, p.166-168, rus] 41-2836



**Offshore structures**

- State-of-the-art report on offshore concrete structures for the Arctic. [1985, 117p., eng] 41-82
- Natural hazards and research needs in coastal and ocean engineering. Nath, J.H., ed. [1984, 62p., eng] 41-83
- Arctic offshore—a challenge to the technical sciences. Kostilainen, V., [1986, p.4-7, eng] 41-84
- RR-3090—a drilling and production platform for the Arctic. [1986, p.8, eng] 41-85
- Research on arctic offshore structures at WARC. Joensuu, A., [1986, p.10-13, eng] 41-86
- Steels for heavy-duty marine and offshore use. [1986, p.34-36, eng] 41-90
- "Ross Rig" completed. Frekstad, P.A., [1986, p.58-59, eng] 41-92
- Overview of project to measure ice forces at Adams Island. Frederking, R.M.W., et al. [1986, p.651-663, eng] 41-171
- Artificial islands. [1986, p.47, 50, eng] 41-241
- Sea ice and the Fairway Rock icefoot. Kovacs, A., et al. [1985, p.25-32, eng] 41-337
- OMAE symposium on offshore and Arctic frontiers, 1st, 1986. [1986, 492p., eng] 41-354
- Steel plates for arctic offshore structures. Okano, S., et al. [1986, p.119-126, eng] 41-357
- Stability of gravity platform foundation. Hoddinott, T., et al. [1986, p.127-135, eng] 41-358
- Laboratory soil testing for design of arctic offshore structures. Saada, A.S., et al. [1986, p.137-149, eng] 41-359
- Corrosion of offshore reinforced concrete structures. Jensen, F.O., [1986, p.405-413, eng] 41-360
- Caisson drilling and completion system. Hewlett, C., [1986, p.459-468, eng] 41-361
- Gas hydrates and Arctic offshore research. [1986, 241p., eng] 41-365
- Ice conditions and offshore structures. [1986, p.31-32, eng] 41-568
- Spray-ice islands evaluated for Arctic-drilling structures. Juvkam-Wold, H.C., [1986, p.57-66, eng] 41-646
- Behaviour of offshore structures; Proceedings. [1985, 1012p., eng] 41-665
- Recent developments in ice mechanics and ice loads. Crossdale, K.R., [1985, p.53-74, eng] 41-666
- Calculation of global ice force from wall-mounted pressure sensors. Myers, P.E., [1985, p.685-692, eng] 41-667
- Review of interaction of icebergs with offshore structures. Arunachalam, V.M., et al. [1985, p.693-704, eng] 41-668
- Predicting offshore structures behavior in arctic regions. Zaleski-Zamenhof, L.C., et al. [1985, p.705-716, eng] 41-669
- Modeling of marine fiber reinforced concrete and frozen soil. Reddy, D.V., et al. [1985, p.845-856, eng] 41-670
- Response of offshore structures to bergy-bit and iceberg impacts. Arockiasamy, M., et al. [1985, p.951-961, eng] 41-671
- Geologic report for the Beaufort Sea planning area, Alaska. Craig, J.D., et al. [1985, 192p. + maps, eng] 41-694
- Ice effects on arctic offshore structures. Bruce, J.C., et al. [1983, p.14-15, eng] 41-788
- Offshore development in northern Canada and Alaska. Minion, R., comp. [1985, 83p., eng] 41-823
- Understanding the Arctic sea floor for engineering. [1982, 141p., eng] 41-893
- Artificial islands for arctic offshore exploration. Gerwick, B.C., Jr., [1984, p.467-476, eng] 41-894
- Northern technical research at the University of Oulu. Ukkola, A., [1986, p.113-118, eng] 41-968
- Determination of ice forces with centrifuge models. Clough, H.F., et al. [1986, p.49-60, eng] 41-1035
- Offshore and navigation conference, Helsinki, 1986; POLARTECH '86. [1986, 3 vols. + Suppl., eng] 41-1087
- Ice engineering research activities on the Japanese coast of Okhotsk Sea. Oshima, M., [1986, p.15-29, eng] 41-1088
- Swedish offshore industry and some Arctic developments. Waasberg, R., [1986, p.41-56, eng] 41-1089
- Behaviour of ice masses in waves. Kokkinowrachos, K., et al. [1986, p.340-357, eng] 41-1105
- Ice fracturing induced by offshore operations. Romagnoli, R., et al. [1986, p.399-408, eng] 41-1109
- Sea spray icing on marine units. Jørgensen, T.S., [1986, p.447-470, eng] 41-1112
- Offshore anti-icing, field results and approval considerations. Lonsdale, J.T., et al. [1986, p.471-483, eng] 41-1113
- Adhesive strength of spray accreted ice on materials and coatings. Lyyra, M., et al. [1986, p.484-496, eng] 41-1114
- Computer modelling of ice accretion and control of icing on marine units. Løset, S., et al. [1986, p.497-511, eng] 41-1115
- Low adhesion coatings for sea spray icing on offshore structures. Sackinger, W.M., et al. [1986, p.512-527, eng] 41-1116
- Structural safety of semis in sub-Arctic waters. Andersson, L., et al. [1986, p.540-564, eng] 41-1117

- Use of ice-isles for protection of petroleum production platforms. Fangel, H., [1986, p.583-604, eng] 41-1119
- Ice-resistant offshore structures. Gershunov, E.M., [1986, p.605-623, eng] 41-1120
- Method for comparing and optimizing Arctic offshore structures. Korppoo, S., [1986, p.624-632, eng] 41-1121
- Development of composite members for Arctic offshore structures. Shioya, T., et al. [1986, p.660-677, eng] 41-1123
- Ice forces on model Arctic structures. Gowda, S.S., et al. [1986, p.693-706, eng] 41-1125
- Swedish investigations of ice-structure interaction in the Baltic. Janson, J.E., [1986, p.707-711, eng] 41-1126
- Indentation tests of laboratory and field ice sheets. Kawasaki, T., et al. [1986, p.712-724, eng] 41-1127
- Ice design of multi-legged structures. Mizikos, J.P., [1986, p.735-748, eng] 41-1129
- Test cone project. Mäkitäinen, M., [1986, p.749-761, eng] 41-1130
- In-ice field measurements for an ice load estimation. Niemenlehto, J.J., et al. [1986, p.762-778, eng] 41-1131
- Steel plates for arctic offshore structures. Itoh, K., et al. [1986, p.807-832, eng] 41-1134
- New materials for sub-arctic and arctic offshore structures. Itoh, K., et al. [1986, p.833-968, eng] 41-1135
- Corrosion resistance steels for low-temperature construction. Itoh, K., et al. [1986, p.869-896, eng] 41-1136
- Material selection and fabrication recommendations for arctic offshore structures. Lohne, P.W., [1986, p.897-910, eng] 41-1137
- Cast steels for sub-arctic offshore applications. Martikainen, H., et al. [1986, p.911-932, eng] 41-1138
- Arctic offshore steels. Räsänen, E., [1986, p.952-969, eng] 41-1140
- Structural hollow sections and PE-coated steel pipes in the Arctic. Soinen, R., [1986, p.970-987, eng] 41-1141
- Arctic class hopper dredges. Brakel, J., et al. [1986, p.988-1000, eng] 41-1142
- Site selection for structures on a floating ice shelf, Antarctica. Sharma, S.S., [1986, p.1093-1105, eng] 41-1147
- Steel plates for offshore structures used in icy seas. Hattori, K., et al. [1984, p.35-52, eng] 41-1192
- Weld properties for ultra-heavy steel plates for offshore structures. Homma, H., et al. [1984, p.53-59, eng] 41-1193
- Forecast of ice accretion on marine structures. Jessup, R.G., [1985, 90p., eng] 41-1194
- Arctic drilling/production unit anchored by tendons. Stewart, W.P., [1986, p.26-28, eng] 41-1223
- Ice loads on offshore structures: the transition from creep to fracture. Sanderson, T.J.O., et al. [1986, p.157-161, eng] 41-1286
- Ice forces on vertical cylindrical structures. Clough, H.F., et al. [1986, p.245-259, eng] 41-1292
- Scale effect in ice. Gershunov, E.M., [1986, p.277-284, eng] 41-1294
- Offshore outlook: the American Arctic. Jahns, H.O., [1985, p.76-82, eng] 41-1328
- High strength steel plates for Arctic offshore structures. Tagawa, H., et al. [1985, p.49-59, eng] 41-1570
- Construction of the mobile drilling platform (Super CIDS) for Arctic use. Maruyama, K., et al. [1985, p.89-102, eng] 41-1571
- Requirements for the strength of offshore structures in the Arctic. Galakhov, I.N., et al. [1986, p.1-22, eng] 41-1579
- Probabilistic theories for the failure of sea ice. Maes, M.A., et al. [1986, p.37-54, eng] 41-1581
- Design, development and deployment of instrument packages to monitor the motion of glacial ice masses at sea. Lever, J.H., et al. [1986, p.225-236, eng] 41-1594
- Experimental study on permeability coefficient of sea ice. Sacki, H., et al. [1986, p.237-246, eng] 41-1595
- Ice load prediction during indentation. Shyam Sunder, S., [1986, p.297-309, eng] 41-1600
- Time and temperature effects in the performance of drilling ice platforms. Vinogradov, A.M., [1986, p.397-405, eng] 41-1607
- Viscoelastic approach to the ice load evaluation. Kajaste-Rudnitski, J., et al. [1986, p.407-420, eng] 41-1608
- Numerical modelling of ice-structure interaction. Chehayeb, F.S., et al. [1986, p.431-444, eng] 41-1610
- Rope-stretching iceberg arrestor. Loire, R., et al. [1986, p.469-478, eng] 41-1613
- Offshore platform with ice-penetrating nose. Gerwick, B.C., Jr., et al. [1983, 8 col. + figs., eng] 41-1670
- Offshore Arctic structure. Weiss, R.T., [1983, 10 col., eng] 41-1771
- Ice island construction. Cox, G.F.N., et al. [1983, 8 col., eng] 41-1777
- Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.39. [1986, 360p., eng] 41-1785

- Behavior of prestressed lightweight concrete subjected to high-intensity cyclic stress at cryogenic temperatures. Berner, D.E., et al. [1986, p.727-736, eng] 41-1865
- Drilling rig transportation in the Canadian arctic islands. Baudais, D.J., et al. [1986, p.420-451, eng] 41-2038
- Ice management procedures for specialized drilling structures. Kimmerly, P.C., et al. [1986, p.764-771, eng] 41-2057
- Steady-state ice-structure interaction analysis. Williams, A.N., et al. [1986, p.989-1006, eng] 41-2069
- Proceedings. [1978, 4 vols. (2653p.), eng] 41-2120
- Drilling offshore western Greenland—ice. Hammett, D.S., et al. [1978, p.119-128, eng] 41-2122
- Scandinavian report. [1983, p.S1-S16, eng] 41-2226
- Arctic R & D—a niche for Finland. Jauho, P., [1986, p.21-24, eng] 41-2263
- Offshore technology in Finland—present state and future perspectives. Potila, A., [1986, p.25-35, eng] 41-2264
- Development of Canadian frontier regions. Pallister, A.E., et al. [1986, p.36-63, eng] 41-2265
- Development of hydrocarbon resources in ice-covered areas: an overview. Gulmizarov, V., [1986, p.111-123, eng] 41-2268
- United States offshore developments in the Bering and Beaufort Seas. Kelly, P.L., [1986, p.124-148, eng] 41-2269
- Offshore oil and gas production structures in freezing conditions. Issangulov, K.I., et al. [1986, p.160-166, eng] 41-2271
- Ice data management for support of offshore operations. Terry, B.F., et al. [1986, p.195-222, eng] 41-2275
- Fire protection of Arctic offshore structures. Merrick, P.E.D., [1986, p.223-237, eng] 41-2276
- Fire protection engineering in modular Arctic facilities. Merrick, P.E.D., [1986, p.238-250, eng] 41-2277
- Model test study of level ice forces on cylindrical multilegged structures. Evers, K.-U., et al. [1986, p.251-275, eng] 41-2278
- Structures on a floating ice shelf in Antarctica. Sharma, S.S., [1986, p.298-311, eng] 41-2280
- Tomorrow's technology in sub-Arctic and Arctic hydrocarbon exploration. Adams, P.F., [1986, p.312-316, eng] 41-2281
- General viewpoints on hydrocarbon developments in northern regions. Howard, M.W., [1986, p.317-323, eng] 41-2282
- SSDC/MAT—an international operation. [1987, p.3-5, eng] 41-2319
- International Offshore Mechanics and Arctic Engineering Symposium, 1987. [1987, 4 vols., eng] 41-2394
- Applications of spray ice and rubble ice for Arctic offshore exploration. Goff, R.D., et al. [1987, p.1-7, eng] 41-2395
- Drilling of a well from a sprayed floating ice platform. Cape Allison C-47. Masterson, D.M., et al. [1987, p.9-16, eng] 41-2396
- Design and construction of the Mars ice island. Funegard, E.G., et al. [1987, p.25-32, eng] 41-2398
- Concrete island under ice loading. Templeton, J.S., III, et al. [1987, p.33-40, eng] 41-2399
- Ice alert levels for Arctic operations. Dunwoody, A.B., [1987, p.41-46, eng] 41-2400
- Design of gravity structures under iceberg loading. Cheang, L.C., et al. [1987, p.55-62, eng] 41-2402
- Ten years of ice-induced vibration isolation in lighthouses. Mäkitäinen, M., [1987, p.261-266, eng] 41-2430
- Explicit technique for calculating first year ice loads on structures. Walden, J.T., et al. [1987, p.267-272, eng] 41-2431
- Level ice indentation on a pile array. Mizikos, J.P., et al. [1987, p.273-279, eng] 41-2432
- Ice beam moving against a sloping structure. Sodhi, D.S., [1987, p.281-284, eng] 41-2433
- Reference strength of ice to be used in designing offshore structures. Tunik, A.L., [1987, p.285-290, eng] 41-2434
- Minimizing iceberg impact loads on gravity base structures. Wishahy, M.A., [1987, p.291-298, eng] 41-2435
- Ice load distribution and ice pressure on offshore structure. Koma, N., et al. [1987, p.299-305, eng] 41-2436
- Ice impacts on semisubmersibles. Lindberg, K., et al. [1987, p.313-320, eng] 41-2438
- Icebreaking tanker moored to an offshore structure. Machemehl, J.L., [1987, p.329-339, eng] 41-2440
- Some statistical issues in the analysis of global ice loads. Salvalaggio, M.A., et al. [1987, p.357-364, eng] 41-2443
- Flow of ice floe against a cylindrical structure. Vinogradov, O.G., et al. [1987, p.365-370, eng] 41-2444
- Probabilistic analysis of sea ice in North Bohai Bay. Liu, T., et al. [1987, p.387-391, eng] 41-2447
- Esso's ice island shows how Arctic life goes on. Cottrill, A., [1987, p.42-48, eng] 41-2526
- Caisson wellheads allow for future use of offshore exploration wells. McIntosh, I., et al. [1987, p.81-85, eng] 41-2571
- Ice problems and research: ships and offshore structures in the Arctic. Joensuu, A., [1986, p.392-399, eng] 41-2883

**Offshore structures (cont.)**

- Qualities of lightweight concrete used for Arctic offshore platform. Tachibana, D., et al, [1987, p.7-15, eng] **41-2922**
- Advances in ice mechanics- 1987. [1987, 49p., eng] **41-2929**
- Advances in ice mechanics in the United Kingdom. Hallam, S.D., et al, [1987, p.1-5, eng] **41-2930**
- Advance in ice mechanics in Finland. Maattanen, M., [1987, p.7-14, eng] **41-2931**
- Recent advances in ice mechanics in Canada. Sinha, N.K., et al, [1987, p.15-35, eng] **41-2932**
- Advances in sea ice mechanics in the USA. Sodhi, D.S., et al, [1987, p.37-49, eng] **41-2933**
- Mat foundations for offshore structures in Arctic regions. Yokel, F.Y., et al, [1987, 146p., eng] **41-3029**
- Arctic offshore research in VTT structural laboratories. Jumppanen, P., [1985, p.51-53, eng] **41-3085**
- Engineering applications and risk assessment: summary and discussion. Allan, D., et al, [1986, p.31-37, eng] **41-3089**
- Construction of deep foundations. Giotov, N.M., et al, [1985, 248p., rus] **41-3125**
- Motion and impact of icebergs against offshore structures. [1986, 133p., eng] **41-3166**
- Canadian Conference on Marine Geotechnical Engineering, 3rd, 1986, vol.3. [1986, p.852-1036 (Vol.3), eng] **41-3168**
- Geotechnical engineering offshore, eastern Canada. Brown, J.D., [1986, p.852-878, eng] **41-3169**
- Geotechnical design for an arctic mobile offshore drilling unit. Hewitt, K.J., et al, [1986, p.956-979, eng] **41-3170**
- Iceberg scouring: hazard for seabed development. Lewis, C.F.M., et al, [1986, p.1020-1021, eng] **41-3173**
- Ice-engineering: research after the rush. Ettema, R., et al, [1987, p.(A)22-(A)33, eng] **41-3353**
- Daring to challenge deep water, thick ice. Kelly, D.F., [1985, p.6-14, eng] **41-3411**
- Ice forces on conical offshore structures. Kolymbas, D., [1987, p.217-231, eng] **41-3572**
- Durability of concrete under arctic offshore conditions. Kivekka, L., et al, [1987, p.935-946, eng] **41-3714**
- Durability of fiber reinforced concrete in a severe marine environment. Hoff, G., [1987, p.997-1041, eng] **41-3717**
- Low-temperature service facilities and recent status of their materials and welding. Saiga, Y., et al, [1986, p.1-21, eng] **41-3785**
- State-of-the-art report on offshore concrete structures for the Arctic. [1986, 117p., eng] **41-3787**
- Large heat input welds for arctic offshore structures. Watanabe, S., et al, [1986, p.B-284, eng] **41-3939**
- Development of heavy thick HT80 steel plates for racks of jack-up rigs. Okano, S., et al, [1987, p.B-14, eng] **41-3940**
- High tensile strength steel plates for arctic offshore structures. Furusawa, J., et al, [1987, p.B-15, eng] **41-3941**
- Effect of microstructure on HAZ toughness of steel for offshore structures. Endo, S., et al, [1987, p.B-16, eng] **41-3942**
- Ice-sheet failure against inclined and conical surfaces. Kaldjian, M.J., [1987, p.145-152, eng] **41-4176**
- Structure-ridge interaction. Gershunov, E.M., [1987, p.85-94, eng] **41-4218**
- Structure-rubble field interaction. Gershunov, E.M., [1987, p.95-103, eng] **41-4219**
- Limit state probabilistic design of offshore Arctic pipelines. Row, D.G., et al, [1987, p.115-123, eng] **41-4632**
- Oil**  
See: Crude oil
- Oil industry**  
See: Petroleum industry
- Oil products**  
See: Petroleum products
- Oil recovery**  
Testing of an oil recovery concept for use in brash and mulched ice. [1986, 43p., eng] **41-269**
- Case study: oil recovery beneath ice. Allen, A.A., [1978, p.261-266, eng] **41-2123**
- Oil spills**  
Oil spill impacts on meadow soils. Oderusova, T.G., [1985, p.27-31, rus] **41-256**
- Testing of an oil recovery concept for use in brash and mulched ice. [1986, 43p., eng] **41-269**
- Bibliography on the fate and effects of arctic marine oil pollution. Young, S.C., ed, [1986, 212p., eng] **41-270**
- Arctic water pollution research: applications of science and technology. [1986, 193p., eng] **41-339**
- Behaviour and fate of arctic oil spills. Bobra, A.M., et al, [1986, p.13-23, eng] **41-341**
- Random transport of oil by sea ice. Colony, R., [1986, p.25-39, eng] **41-342**
- Oil in ice computer simulation model. Wotherspoon, P.D., et al, [1986, p.41-46, eng] **41-343**
- Fate of petroleum pollutants in Arctic ecosystems. Atlas, R.M., [1986, p.59-67, eng] **41-345**
- Coastal ecology and the Arctic oil industry. Sendstad, E., [1986, p.87-96, eng] **41-347**

- Petroleum residues in the Canadian Arctic marine environment. Levy, E.M., [1986, p.161-169, eng] **41-352**
- Impact of a scientific conference-conference summary. Bridge, W.A., [1986, p.185-190, eng] **41-353**
- Guide to marine transportation information sources in Canada. Joba, J.C., [1985, 308p., eng] **41-562**
- Offshore development in northern Canada and Alaska. Minion, R., comp, [1985, 83p., eng] **41-823**
- Use of dispersants for oil spill countermeasures on arctic beaches. Owens, E.H., et al, [1984, p.324-337, eng] **41-895**
- Chemically dispersed and untreated oils on arctic shores. Boehm, P.D., [1984, p.338-360, eng] **41-896**
- Recent developments at the Arctic Science and Technology Information System. Goodwin, R., [1986, p.145-148, eng] **41-972**
- Conceptual oil dispersion modeling, lower Cook Inlet-Shelikof Strait. Schleuter, R.S., et al, [1984, p.389-469, eng] **41-1783**
- U.S. Coast Guard Arctic Pollution Response Research and Development. Fitzpatrick, M., [1985, p.863-865, eng] **41-1914**
- Effect of crude oil on tidal-flat ecosystem in Port Valdez, Alaska. Naidu, A.S., et al, [1978, p.97-104, eng] **41-2121**
- Case study: oil recovery beneath ice. Allen, A.A., [1978, p.261-266, eng] **41-2123**
- Behavior of the Bouchard No.65 oil spill in the ice-covered waters of Buzzards Bay. Deslauriers, P.C., et al, [1978, p.267-276, eng] **41-2124**
- First offshore drilling in the Beaufort Sea. Todd, M.B., [1978, p.399-405, eng] **41-2125**
- Modeling of the Glaciers-Ocean-Atmosphere system. Verbitskii, M.I.A., et al, [1986, 133p., rus] **41-2253**
- Basic methods and principal results of studying the role of physical, chemical and biologic factors in the cleaning of Arctic waters and ice from petroleum hydrocarbons. Il'inski, V.V., et al, [1986, p.171-173, rus] **41-2390**
- Analysis of oil pollution in arctic seas, using biotechnological methods. Levchenko, A.B., et al, [1986, p.180-181, rus] **41-2392**
- Oil spills in pack ice. [1987, 95p. + appends., eng] **41-3074**
- In situ* burning of oil in experimental ice leads. Brown, H.M., et al, [1987, 27p., eng] **41-3075**
- Marine processes. Baker, J.M., et al, [1987, p.50-74, eng] **41-3233**
- Environmental assessment of the Alaskan continental shelf, Vol.3: effects and contaminant baselines. [1980, 352p., eng] **41-3380**
- Oil slicks in ice covered rivers. Berry, B.A., et al, [1985, p.369-379, eng] **41-3471**
- Human factors in the development of basic Arctic geosystems. Govorukha, L.S., [1986, p.24-30, rus] **41-3863**
- Oil spill effect on melting temperature of sea ice. Izmailov, V.V., [1986, p.113-117, rus] **41-3868**
- Albedo and heat balance of oil-polluted ice-snow surfaces. Izmailov, V.V., et al, [1986, p.117-120, rus] **41-3869**
- Use of acoustics in localizing under-ice oil spills. Francois, R.E., et al, [1983, 17p., eng] **41-3927**
- Polynuclear hydrocarbon concentrations from oil spilled in seawater. Ventajas, L., [1986, 15p., spa] **41-3999**
- Process of natural cleaning of the Arctic Basin surface (theoretical and experimental studies). Izmailov, V.V., [1986, p.51-58, rus] **41-4196**
- Oil motion during lead closure. MacNeill, M.R., et al, [1987, 13p., eng] **41-4529**
- Oil storage**  
Combined Production and Storage System (COMPASS) used in ice-infested waters. Pass, H., [1986, p.633-659, eng] **41-1122**
- Crude oil storage facility in the Arctic. Philippi, H.L., et al, [1987, p.63-67, eng] **41-2403**
- Oil transportation**  
See: Petroleum transportation
- Oil wells**  
Reaction of tundra vegetation to petroleum pollution induced by drilling. Gnat, L.V., [1986, p.82-93, rus] **41-1171**
- Disturbance of tundra vegetation by oil field development. Tentiukov, M.P., et al, [1986, p.94-103, rus] **41-1172**
- Okhotsk Sea**  
Ice engineering research activities on the Japanese coast of Okhotsk Sea. Oshima, M., [1986, p.15-29, eng] **41-1088**
- Exogenic relief formation in the Far East. Skrylnik, G.P., ed, [1985, 155p., rus] **41-1908**
- Quantitative evaluation of the role of near-shore ice in shoreline modification in the Okhotsk Sea. Stepanova, L.E., [1985, p.90-98, rus] **41-1909**
- Sea ice distribution off Okhotsk Sea coast of Hokkaido, Jan.-Apr. 1986. Aota, M., et al, [1986, p.25-50, jpn] **41-3504**
- On the relationship between atmospheric circulation and the fluctuations in the sea ice extents of the Bering and Okhotsk seas. Cavalleri, D.J., et al, [1987, p.7141-7162, eng] **41-4267**
- Oceanographic influences on the sea ice cover in the Sea of Okhotsk. Gratz, A.J., et al, [1981, 18p., eng] **41-4327**

**Operating costs**

See: Cost analysis

**Optical phenomena**

- Measurements of refractive index spectra over snow. Andreas, E.L., [1986, p.248-260, eng] **41-2984**
- Polarization and Brewster angle properties of light pillars. Sassen, K., [1987, p.570-580, eng] **41-3150**
- Faceted snow crystals. Hallett, J., [1987, p.581-588, eng] **41-3151**
- Optical properties**  
Excess loss of single-mode jacketed optical fiber at low temperature. Yabuta, T., et al, [1983, p.2356-2362, eng] **41-486**
- Fiber optics in adverse environments. Lyons, P.B., ed, [1981, 276p., eng] **41-579**
- Response of irradiated optical waveguides at low temperatures. Taylor, E.W., et al, [1981, p.40-50, eng] **41-581**
- Cold-induced losses in loose-sheath fiber-optic cables. Holliday, V.M., et al, [1981, p.77-79, eng] **41-582**
- Survivability of Army fiber optics systems. Wichansky, H., et al, [1981, p.110-117, eng] **41-583**
- Non-metallic optical fiber cable for use under low temperature. Ogai, M., et al, [1981, p.12(2-1)-12(2-4), eng] **41-660**
- Luminescence studies of condensed phases at low temperatures. Variano, B.F., et al, [1986, p.497-498, eng] **41-960**
- Low-temperature behaviour of high-birefringence fibres. Marrone, M.J., et al, [1985, p.703-704, eng] **41-1410**
- Frost-resistant coated optical fibres. Abramov, A.A., et al, [1985, p.805-807, eng] **41-1411**
- Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al, [1986, 63p., rus] **41-2362**
- See also: Albedo; Ice crystal optics; Ice optics; Snow optics

**Organic nuclei**

- Studies of ice-forming properties of phlogoglucinol under field conditions. Chernova, T.N., et al, [1986, p.116-123, rus] **41-3465**

**Organic soils**

- Water accumulation and soil heave in seasonally freezing ground. Ganc, [1985, p.82-83, rus] **41-315**
- Cryogenic deformations in reclaimed lands of the Khanka plain. Rai'ko, V.D., [1986, p.160-162, rus] **41-2251**
- Age and evolution of soils in the USSR. Ivanov, I.V., ed, [1986, 230p., rus] **41-2352**
- Buried soils of northeastern Yakutia (the Khallerchinskaya tundra). Fominykh, L.A., et al, [1986, p.109-120, rus] **41-2354**
- Organic soils. Rubinshtein, A.I.A., [1986, 89p., rus] **41-2729**
- Water saturation and transfer in geosystems from remote sensing data. Mandych, A.F., et al, [1986, p.45-55, rus] **41-2735**
- Peat excavation by blasting in channel construction. Frash, G.B., [1986, p.54-61, rus] **41-2905**
- Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p., rus] **41-2911**
- Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] **41-2962**
- Freezing and thawing of drained peat soils in mountain forests. Chindiaev, A.S., [1987, p.60-64, rus] **41-3737**
- Multivariate regression analysis of the process of frozen peat dehydration. Aleksandrov, B.M., [1986, p.15-19, rus] **41-3766**
- Soil formation on coastal plains of the Oktyabr'skaya Revolyutsiya Islands. Govorenkov, B.F., [1986, p.41-51, rus] **41-3865**
- Soil-melioration studies in Karelia. Nesterenko, I.M., ed, [1986, 144p., rus] **41-4115**
- Peat mineralization in Kola Peninsula and southern Karelia. Pervezzev, V.N., et al, [1986, p.64-72, rus] **41-4116**
- Calcium in the peat soils of northern Europe. Sin'kevich, E.I., [1986, p.72-84, rus] **41-4117**
- Problems of origin and geography of soils. Liverovskii, I.U.A., [1987, 248p., rus] **41-4555**
- Current problems in humus formation. Archegova, I.B., ed, [1986, 172p., rus] **41-4563**
- Micromorphological characteristics of humus profile in loamy taiga soils. Rusanova, G.V., [1986, p.69-77, rus] **41-4564**
- Humus profiles in the paludified loamy podzols of taiga. Vturin, G.M., [1986, p.78-88, rus] **41-4565**
- Role of humus-formation processes in the development of soil profiles in Arctic deserts of October Revolution Island in Severnaya Zemlya. Govorenkov, B.F., [1986, p.126-135, rus] **41-4566**
- Organizations**  
United States: an arctic nation. [1987, 46p., eng] **41-2566**
- Report of the U.S. Arctic Research Commission, 1985. [1986, 33p., eng] **41-3425**
- Organization and activities of the Research Institute for Hazards in Snowy Areas, Niigata University. [1985, p.223-255, jpn] **41-4589**
- Activities of the Research Institute for Hazards in Snowy Areas, Japan. [1985, p.127-160, jpn] **41-4594**

- Orientation**  
See: Slope orientation
- Organographic effects**  
See: Topographic effects
- Oscillations**  
Ice air interaction theory for migration of marginal ice zone. Chu, P.C., [1986, p.863-883, eng] 41-869  
See also: Vibration
- Outwash**  
Thermal properties of sandur and tundra regions due to weather conditions. Joly, D., [1985, p.95-101, fre] 41-376  
Nitrogen of a moss ecosystem on glacial outwash sands, New Hampshire. Bowden, R.D., [1987, 149p., eng] 41-3346
- Oxygen**  
Disolved-oxygen depressions under ice cover in two Yukon rivers. Whitfield, P.H., et al, [1986, p.1675-1679, eng] 41-1863  
Comment on "Oxygen budget of a perennially ice-covered antarctic lake [and Reply]. Top, Z., [1987, p.520-521, eng] 41-4226  
Evolution of dissolved oxygen in the Arctic mixed layer. Top, Z., [1987, p.7191-7194, eng] 41-4271
- Oxygen isotopes**  
Possibilities of oxygen-isotope technique in studying ground ice. Arkhangelov, A.A., et al, [1986, p.88-92, rus] 41-111  
Using stable isotopes in studying ground ice. Kritauk, L.N., et al, [1986, p.92-97, rus] 41-112  
Ross Ice Shelf oxygen isotopes and west antarctic climate history. Grootes, P.M., et al, [1986, p.49-67, eng] 41-612  
Latest Miocene delta O-18 changes, ice volume and sea level. Hodell, D.A., et al, [1986, p.411-414, eng] 41-1174  
Study of tabular ground ice bodies from the Ledyansy Gora section in the Yenisey valley using the oxygen isotope method. Val'kmiac, R.A., et al, [1986, p.32-38, eng] 41-1789  
Chronostratigraphy of syngenetic permafrost deposits by oxygen-isotope analysis. Arkhangelov, A.A., et al, [1986, p.415-417, rus] 41-2307  
Short-term variation of oxygen isotopic composition of falling snow. Fujiyoshi, Y., et al, [1986, p.353-363, eng] 41-2502  
Land ice/sea ice transition at J-9 on Ross Ice Shelf. Grootes, P.M., et al, [1985, p.66-68, eng] 41-2628  
Two Be-10 peak depositions in ice during last glaciation. Raisbeck, G.M., et al, [1987, p.273-277, eng] 41-2891  
Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1985, 259p., rus] 41-3534  
Prospects for using oxygen isotope determinations in paleogeocryological reconstructions. Vasil'chuk, I.U.K., et al, [1985, p.64-65, rus] 41-3535  
Ground ice origin from deuterium and heavy oxygen isotope content. Vasil'chuk, I.U.K., et al, [1985, p.66-68, rus] 41-3536  
Isotope composition of ground ice on the Yamal Peninsula. Kritauk, L.N., et al, [1985, p.142-143, rus] 41-3537  
Oxygen-isotope composition in the ocean-glacier system. Nikolaev, V.I., et al, [1985, p.172-174, rus] 41-3538  
Oxygen isotope composition of syngenetic ice wedges (analytical data, problems of paleoclimatic reconstruction). Vasil'chuk, I.U.K., et al, [1986, p.107-119, rus] 41-3775  
Risser-Larsen oxygen isotopes and accumulation rates. Orheim, O., et al, [1986, p.33-47, eng] 41-4095
- Pack ice**  
Yield curve of pack ice (1): physical meaning. Ito, H., [1986, p.105-109, eng] 41-355  
Yield curve of pack ice (2): general shape. Ito, H., [1986, p.111-117, eng] 41-356  
Ice pack motion from AVHRR imagery. Ninnis, R.M., et al, [1986, p.10,725-10,734, eng] 41-1012  
Snow melt and surface albedo in the Arctic Basin. Robinson, D.A., et al, [1986, p.945-948, eng] 41-1215  
The ice: a journey to Antarctica. Pyne, S.J., [1986, 428p., eng] 41-2079  
Observations of internal gravity waves under the Arctic pack ice. Levine, M.D., et al, [1987, p.779-782, eng] 41-2327  
All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. [1986, 268p., rus] 41-2384  
Recent trends in studying the ecology of Polar seas of the Arctic. Matishov, G.G., [1986, p.1-5, rus] 41-2385  
Observation of a model-scale semisubmersible in pack ice. Szeto, K., et al, [1987, p.341-350, eng] 41-2441  
Kinematics of sea ice. Thorndike, A.S., [1986, p.489-549, eng] 41-2993  
Accuracy of surface geostrophic wind forecasts in the central Arctic. Moritz, R.E., [1986, p.1135-1161, eng] 41-3004  
Oil spills in pack ice. [1987, 95p. + appends., eng] 41-3074  
Comparison of boundary layer model with turbulent boundary layer. Myrhaug, D., [1987, p.135-148, eng] 41-3135  
Ice diatom floras in Arthur Harbor. Krebs, W.N., et al, [1987, p.163-171, eng] 41-3427  
Pack ice/rubble field interaction study. Issungnak 1980. [1981, 88p. + appends., eng] 41-3550  
Ice-algae photosynthesis under fast ice at Showa Station. Satoh, H., et al, [1986, p.34-42, eng] 41-3631  
Ice conditions in the "Weddell-POLEX-81" study area. Chugut, I.V., [1986, p.37-41, rus] 41-4185  
Weddell-POLEX-81 observations of atmospheric circulation over the Atlantic. Lysakov, E.P., [1986, p.45-49, rus] 41-4186  
Ice process development. Romanov, A.A., [1986, p.28-35, rus] 41-4193  
Fractures in arctic winter pack ice (North Water, northern Baffin Bay). Steffen, K., [1987, p.211-214, eng] 41-4460  
Modelling of Labrador Sea pack ice, with an application to estimating geostrophic currents. Kelher, T.E., et al, [1987, p.161-176, eng] 41-4493  
Problem of diminishing the force of icebreaker friction against ice. Maksutov, D.D., [1984, p.15-16, rus] 41-4508
- Paints**  
See: Protective coatings
- Pakistan**  
Glacier mapping for an inventory of the Indus drainage basin. Kick, W.J., [1986, p.102-105, eng] 41-749  
—Indus River  
Flow forecasts of the Indus River, Pakistan. Makhdoom, M.T.A., et al, [1986, p.171-184, eng] 41-4517
- Paleobotany**  
Development of taiga forests. Savina, L.N., [1986, 189p., rus] 41-2258  
Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] 41-4280
- Paleoclimatology**  
Climatic reconstructions from geocryological data. Danilov, I.D., et al, [1986, p.61-65, rus] 41-106  
Ice cover on Kerguelen during the last glacial. Hall, K., [1984, p.225-232, eng] 41-481  
Global ice-sheet system interlocked by sea level. Denton, G.H., et al, [1986, p.3-26, eng] 41-611  
Ross Ice Shelf oxygen isotopes and west antarctic climate history. Grootes, P.M., et al, [1986, p.49-67, eng] 41-612  
Melting history of Antarctica during the past 60,000 years. Labeyrie, L.D., et al, [1986, p.701-706, eng] 41-616  
Snow and ice in Earth's environment. Kotliakov, V.M., [1986, 157p., rus] 41-698  
Sand-gravel pockets in the lower Seine valley: a status report. Chancelier, A., [1986, p.83-104, fre] 41-852  
Geologic field studies of the Miki Fjord area, East Greenland. Bird, D.K., et al, [1985, p.219-235, eng] 41-872  
Latest Miocene delta O-18 changes, ice volume and sea level. Hodell, D.A., et al, [1986, p.411-414, eng] 41-1174  
Pliocene variations of Antarctic Convergence in southwest Atlantic. Ciesielski, P.F., et al, [1986, p.197-232, eng] 41-1264  
Development of the South Shetland Islands and the Antarctic Peninsula. Barsch, D., et al, [1986, p.211-218, eng] 41-1279  
Where are the former glacial relics in Guilin area. Shi, Y., et al, [1986, p.97-106, chi] 41-1457  
Model of Pleistocene glaciation of the system "glaciers-ocean-troposphere-atmosphere". Karachenov, A.T., [1986, p.38-45, rus] 41-1635  
Mathematical model and forecasts of thermokarst evolution. Grigorian, S.S., et al, [1986, p.45-49, rus] 41-1636  
Glaciomarine facies in northern Ireland. McCabe, A.M., [1986, p.880-894, eng] 41-1862  
Climatic belts in the case of a unipolar glaciation. Flohn, H., [1984, p.609-620, eng] 41-1974  
Climatic changes on a yearly to millennial basis. [1984, 667p., eng] 41-2005  
Climatic fluctuations and the peculiarities of Holocene permafrost development in the USSR. Maksimova, L.N., et al, [1986, p.45-58, rus] 41-2085  
Development of taiga forests. Savina, L.N., [1986, 189p., rus] 41-2258  
Model calculation of glacial evolution. Krass, M.S., [1984, p.86-103, rus] 41-2357  
Aerosol concentrations over the last climatic cycle (160 kyr) from an antarctic ice core. De Angelis, M., et al, [1987, p.318-321, eng] 41-2505  
Arctic shelf in the late Pleistocene and certain problems of paleogeology. Vozovik, I.U.I., [1986, p.449-452, eng] 41-2572  
Evidence for Holocene thaw unconformity at Mayo, Yukon Territory. Burn, C.R., et al, [1986, p.794-803, eng] 41-2684  
Pinedale deglaciation and Holocene environmental changes, Lemhi Mountains. Butler, D.R., [1986, p.39-46, eng] 41-2705  
Long-term climatic changes indicated by crystal growth in polar ice. Petit, J.R., et al, [1987, p.62-64, eng] 41-2750
- Influence of neotectonics on the development of cryogenic formations. Sukhov, A.G., et al, [1986, p.103-115, rus] 41-2826  
Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap. Thompson, L.G., et al, [1986, p.361-364, eng] 41-2860  
Two Be-10 peak depositions in ice during last glaciation. Raisbeck, G.M., et al, [1987, p.273-277, eng] 41-2891  
Nitrate deposition in Antarctica; temporal and spatial variations. Laird, C.M., [1986, 268p., eng] 41-3155  
Paleoclimatic constraints on ice shelves in the Greenland and Norwegian seas. Lindstrom, D.R., et al, [1986, p.313-337, eng] 41-3248  
Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1985, 259p., rus] 41-3534  
Prospects for using oxygen isotope determinations in paleogeocryological reconstructions. Vasil'chuk, I.U.K., et al, [1985, p.64-65, rus] 41-3535  
Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] 41-3771  
Glacial and periglacial geology of Spitsbergen, Svalbard. Rowan, D.E., [1981, 115p., eng] 41-3892  
Quaternary glaciation and paleogeography of West Kunlun Mountains. Zheng, B., [1987, p.93-102, eng] 41-3920  
Polar ice cores. Palais, J.M., [1987, p.55-60, eng] 41-3937  
Holocene glacier fluctuations. Osborn, G., et al, [1987, p.26-28, eng] 41-4098  
Reconstruction of environmental conditions of the north slope glaciers of the Terskey Ala-Tau Range from dendrologic data. Solomina, O.N., et al, [1987, p.235-242, rus] 41-4153  
Ice calving, carbon dioxide and control of ice ages. Lockwood, J.G., [1985, p.89-96, eng] 41-4276  
Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] 41-4280
- Paleoecology**  
Glacioclimatic conditions in the European Arctic in the Late Holocene. Surova, T.G., et al, [1986, p.149-154, rus] 41-124  
Climate and vegetation of Primor'e as affected by Pleistocene glaciation. Shumova, G.M., et al, [1986, p.157-161, rus] 41-126  
Melting history of Antarctica during the past 60,000 years. Labeyrie, L.D., et al, [1986, p.701-706, eng] 41-616  
Pliocene variations of Antarctic Convergence in southwest Atlantic. Ciesielski, P.F., et al, [1986, p.197-232, eng] 41-1264  
Compiling dendroclimatograms for distinguishing glaciation conditions. Solomina, O.N., [1986, p.106-112, rus] 41-1648  
Influence of paleo-cryogenic microrelief on erosional processes and soil formation in the central Russian Plain. Velichko, A.A., et al, [1986, p.102-113, rus] 41-1823  
Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed, [1986, 165p., rus] 41-3428  
Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1985, 259p., rus] 41-3534  
Prospects for using oxygen isotope determinations in paleogeocryological reconstructions. Vasil'chuk, I.U.K., et al, [1985, p.64-65, rus] 41-3535  
Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] 41-3771  
Reconstruction of environmental conditions of the north slope glaciers of the Terskey Ala-Tau Range from dendrologic data. Solomina, O.N., et al, [1987, p.235-242, rus] 41-4153  
Diatom biostratigraphy and paleoecology with a Cenozoic history of antarctic ice sheet. Harwood, D.M., [1986, 592p., eng] 41-4280  
Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., [1986, 78p., rus] 41-4523  
Micropaleontology and sedimentology of Prudhoe Bay. McDougall, K., et al, [1986, 62p. + 14 plates, eng] 41-4600
- Paludification**  
Relations between swamp development and relief forms of northern plains. Kolomytsev, V.A., [1985, p.125-149, rus] 41-194  
Embankments built of water-logged earth with horizontal sand-drains. Vasil'ev, I.U.M., [1985, p.2-3, rus] 41-505  
Regularities governing thermophysical properties of peat in the Tumen' region. Danielian, I.U.S., et al, [1986, p.46-52, rus] 41-600  
Studying hydrographic indices of rivers in the Irtysh area taiga. Trofimova, E.V., [1986, p.66-71, rus] 41-812  
Jamming of taiga rivers by fallen trees. Zemtsov, A.A., et al, [1986, p.101-107, rus] 41-813  
Substations 110 kv with the equipment housed in superblock structures. Ezrakhovich, L.O., [1986, p.3-6, rus] 41-909  
Productivity of forest phytocenoses. Elagin, I.N., ed, [1984, 149p., rus] 41-1078

**Paludification (cont.)**

- Influence of paludification and forest fires on forest development. Glebov, F.Z., et al, [1984, p.133-141, rus] 41-1083
- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Bratshev, A.P., ed, [1986, 119p., rus] 41-1167
- Hydrologic investigations of landscapes. Bachurin, G.V., ed, [1986, 208p., rus] 41-1365
- Swamp stability equations for taiga. Geleta, I.F., [1986, p.49-57, rus] 41-1366
- Interrelations between forest and swamp in western Siberia. Glebov, F.Z., [1986, p.145-152, rus] 41-1405
- Modular construction of oil and gas industry objects. Manual. Batalin, I.U.P., ed, [1986, 576p., rus] 41-1746
- Chemical element balance in the end-moraine landscapes of southern taiga. Shitikova, T.E., [1985, p.104-113, rus] 41-1818
- Construction of electric power substations in permafrost regions. Khomutov, V.A., et al, [1986, p.22-23, rus] 41-1920
- Radiation regime of southern Tyumen' forests. Abdullaev, A.A., [1986, p.52-56, rus] 41-2249
- Impact of ejecta from coal-fueled power plants on palud north-taiga pine forests. Alekseev, V.A., et al, [1986, p.664-672, rus] 41-2562
- Water saturation and transfer in geosystems from remote sensing data. Mandych, A.F., et al, [1986, p.45-55, rus] 41-2735
- Interrelationships among components of biogeocenosis in southern taiga. Smirnov, A.V., ed, [1986, 120p., rus] 41-2898
- Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al, [1986, 112p., rus] 41-2902
- Exploration and economic evaluation of petroleum deposits in subarctic regions. D'iachkova, E.A., [1987, 108p., rus] 41-2961
- Changes in spring-flood runoff induced by forest swamp drainage. Pakutin, A.V., [1987, p.67-70, rus] 41-3082
- Development of swamps and paludal forests in western Siberia. Efremov, S.P., et al, [1986, p.26-29, rus] 41-3743
- Landscape conditions, hydrology and hydrochemistry of lakes in Central Priob'ye. Tiul'kova, L.A., [1986, p.64-66, rus] 41-3977
- Stability of tundra landscapes under transport loads. Zimov, S.A., et al, [1986, p.22-23, rus] 41-4063
- Changes induced by industrial activities in the Upper Kolyma basin. Grigor'eva, N.N., et al, [1986, p.9-13, rus] 41-4467
- Cryosphere and the zonality of soil melioration processes. Mel'nikov, P.I., et al, [1986, p.94-98, rus] 41-4468
- Humus profiles in the paludified loamy podzols of taiga. Vtiurin, G.M., [1986, p.78-88, rus] 41-4565
- Palynology**
- Spore and pollen distribution in snow on the southern slope of El'brus Mountain. Khomelevskoi, I.F., et al, [1986, p.113-115, rus] 41-1649
- Development of taiga forests. Savina, L.N., [1986, 189p., rus] 41-2258
- Palynology as a method for dating iceberg scours. Mudie, P.J., [1986, p.233-239, eng] 41-3115
- Peat formation of the Rutor Glacier (Acosta Valley). Results obtained by palynostratigraphic study of new peat outcrops near the glacier snout. Armando, E., et al, [1985, p.144-149, ita] 41-3182
- Climatic reconstructions from geocryological data. Danilov, I.D., et al, [1986, p.303-308, eng] 41-3621
- See also:** Pollen
- Panel**
- Increasing the thermoinsulative properties of lightweight concrete panels. Natsievskii, I.U.D., [1986, 88p., rus] 41-2647
- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] 41-2919
- Issungnak rubble pile—field installation of ice stress panels—interim report. Vaudrey, K.D., [1980, 13p. + append., eng] 41-3552
- Ice stress panel results, Issungnak 1980. McGonigal, D., [1981, 14p. + figs., eng] 41-3553
- Facade elements clad with clinker finish. Orantie, K., [1987, 36p. + append., fin] 41-3844
- See also:** Large panel buildings
- Particle size distribution**
- Three-parameter snow growth model. Lo, K.K., et al, [1982, p.197-200, eng] 41-14
- Observed changes in ice crystal type in thick stratiform clouds. Dyer, R.M., et al, [1982, p.201-202, eng] 41-15
- Aircraft observations of large scale cloud systems. Cohen, I.D., [1982, p.203-206, eng] 41-16
- Hailstone concentration and size at the ground and at the melting level. Cheng, L., et al, [1982, p.423-426, eng] 41-48
- Fine particle translocation in soils of glacial deposits. Locke, W.W., [1986, p.33-43, eng] 41-1186
- Sediments in a tidewater glacier, Baffin I., Canada. Dowdeswell, J.A., [1986, p.45-56, eng] 41-1187
- Particle size distribution in patterned ground, Niwot Ridge, Colorado. Rissing, J.M., et al, [1985, p.153-163, eng] 41-1226
- Ice crystallization in continuous crystallizers. Shirai, Y., et al, [1986, p.2241-2246, eng] 41-1348
- Size dependence of natural aerosol for ice nucleation. Berezinskii, N.A., et al, [1986, p.28-32, rus] 41-2879
- Grading and frost heave. Hughes, R., [1981, p.51-56, eng] 41-2926
- Particles**
- Measurement of the extinction of water ice particles. Krütschmer, W., et al, [1985, p.149-154, eng] 41-1702
- Microparticles in Dome C ice cores. Gaudichet, A., et al, [1986, p.250-261, eng] 41-1755
- Ice particle evolution in the anvil of a severe thunderstorm. Heymsfield, A.J., [1986, p.2463-2478, eng] 41-4052
- Motion of sub-freezing ice past particles. Walder, J.S., [1986, p.41-4296, eng] 41-4296
- See also:** Aerosols
- Patterned ground**
- Quaternary research (Selected papers of the 11th INQUA Congress). Kartashov, I.P., ed, [1986, 200p., rus] 41-549
- Mars: periglacial and glacial relief forms. Lucchitta, B.K., [1986, p.183-193, rus] 41-550
- Dynamics of periglacial sorted circles in western Spitsbergen. Hallet, B., et al, [1986, p.81-99, eng] 41-792
- Particle size distribution in patterned ground, Niwot Ridge, Colorado. Rissing, J.M., et al, [1985, p.153-163, eng] 41-1226
- Flora and vegetation of mosses in tree-free areas of Soya Coast and Prince Olav Coast, East Antarctica. Kanda, H., [1981, p.91-100, eng] 41-3567
- Development of ice-wedge polygon formations. Romanovskii, N.N., [1972, p.33-41, rus] 41-3747
- Sedimentary deposits in the northern lowland plains, Mars. Lucchitta, B.K., et al, [1986, p.E166-E174, eng] 41-3749
- Soil formation on coastal plains of the Otkryabr'skaya Revolyutsiya Islands. Govorenkov, B.F., [1986, p.41-51, rus] 41-3865
- Development of spot medallions and circular fractures on their surface. Pukemo, M.N., [1987, p.85-89, rus] 41-4170
- Development of ice-vein pseudomorphs in the Russian plain. Minervin, A.V., et al, [1986, p.90-100, rus] 41-4469
- See also:** Polygonal topography
- Pavement heaving**
- See:** Frost heave
- Pavement icing**
- See:** Road icing
- Pavements**
- Calculating frost resistance of road pavements. Efimenko, V.N., et al, [1985, p.18-19, rus] 41-508
- Efficient construction of road pavements for the Tyumen' region. Kretov, V.A., et al, [1986, p.10-12, rus] 41-509
- Estimating design values of road freezing depths. Galvoronskii, V.N., [1986, p.12-13, rus] 41-510
- Airfield pavement evaluation, Anchorage, Alaska. Alexander, D.R., [1986, 36p. + figs., eng] 41-524
- Effects of freeze thaw cycles on granular soils for pavements. Cole, D., et al, [1986, 70p., eng] 41-593
- Investigation of seasonal load restrictions in Washington State. Mahoney, J.P., et al, [1985, p.58-67, eng] 41-609
- Assessment of freeze-thaw damage in cement stabilised soils. Kettle, R.J., [1986, p.16-31, eng] 41-641
- Scientific and technical progress in road construction. Altmatov, I.T., ed, [1984, 188p., rus] 41-785
- Theoretical basis for planning northern cities. Panov, L.K., [1986, p.146-154, rus] 41-1206
- Thermal expansion of asphalt pavement at low temperature. Osterkamp, T.E., et al, [1986, p.299-301, eng] 41-1298
- Concrete pavers for aircraft pavement surfaces. Emery, J.A., [1986, p.609-623, eng] 41-1546
- Ice-inhibiting additives in road surfacing. Johannes, H., [1981, p.207-219, ger] 41-1548
- Polystyrene foam used in construction of road and airport pavements. Ivanov, V.N., [1986, p.14-16, rus] 41-1882
- Effect of temperature variations on the bonding of concrete overlays. Dhir, M.P., [1984, p.172-179, eng] 41-2073
- Subgrades and pavements in permafrost. Zhu, X., [1986, p.1-9, eng] 41-2197
- Structural heat-engineering for road pavements. Mikhailov, A.V., et al, [1986, 149p., rus] 41-2210
- All-Union tutorial seminar on mathematical modeling in science and technology. Summaries, [1986, 333p., rus] 41-2381
- Modeling the road icing process. Vorotnikov, V.I., et al, [1986, p.77-78, rus] 41-2383
- Deformation of pavements during freeze thaw cycles. Johnson, T.C., et al, [1986, 138p., eng] 41-2549
- Susceptibility to icing on road pavements. Gustafson, K., [1986, 73p. + append., swe] 41-2567
- Resilient moduli of soil specimens in the frozen and thawed states. Johnson, T.C., et al, [1986, 62p., eng] 41-2613
- Setting standards for water-resistance properties of road pavement materials for Siberian conditions. Shabanov, V.M., [1986, p.106-110, rus] 41-2758
- Automated highway design. Fedotov, G.A., [1986, 317p., rus] 41-2861
- Road design, allowing for climatic impact on traffic conditions. Vasil'ev, A.P., [1986, 248p., rus] 41-2894
- Symposium on Unbound Aggregates in Roads, 1981. [1981, 207p., eng] 41-2923
- Granular base and sub-base materials. Hill, J., [1981, p.33-38, eng] 41-2924
- Freeze thaw tests of road and airfield subgrade soils. Cole, D.M., et al, [1987, 36p., eng] 41-2942
- Ice pavement detection system; Phase 1, SBIR. [1987, 125p., eng] 41-3027
- Performance of bituminous surface treatments in Alaska. Final report. Connor, B., [1981, 61p., eng] 41-3046
- Chemical solutions to the chemical problem. Minsk, L.D., [1985, p.238-244, eng] 41-3194
- Freeze-thaw test to determine the frost susceptibility of soils. Chamberlain, E.J., [1987, 90p., eng] 41-3258
- Evaluation and prevention of water damage to asphalt pavement materials. [1985, 154p., eng] 41-3332
- Evaluation of stripping problems in Oregon. Takallou, H., et al, [1985, p.22-48, eng] 41-3333
- Moisture damage to various foamed asphalt mixtures. Castedo, H., et al, [1985, p.104-115, eng] 41-3335
- Prevention of water damage in asphalt mixtures. Kennedy, T.W., [1985, p.119-133, eng] 41-3336
- Investigations of active infrared detection of pavement icing. Rosen, D.I., [1987, 39p., eng] 41-3763
- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., [1987, 208p., rus] 41-3804
- Use of high float emulsion asphalt in Alaska (Report to the Legislature). Connor, B., [1985, 12p., eng] 41-4001
- Changes in properties of asphalt concretes due to aging. Sato, K., et al, [1987, p.85-116, eng] 41-4022
- Initial cooling of hot-mix asphalt concrete mats. White, S., et al, [1987, p.117-146, eng] 41-4023
- Temperature distributions in asphalt pavements. Himeno, K., et al, [1987, p.241-275, eng] 41-4025
- Pavement structure subjected to low temperature. Selvadurai, A.P.S., et al, [1987, p.277-301, eng] 41-4026
- Cold climate performance of Canadian airport pavements. Haas, R., et al, [1987, p.303-332, eng] 41-4027
- Tensile properties of asphalt concrete at freezing temperature. Anderson, K.O., et al, [1987, p.333-366, eng] 41-4028
- Bearing capacity of asphalt pavement at low temperature. Kasahara, A., et al, [1987, p.367-396, eng] 41-4029
- Investigation of repair for thermal cracking in asphalt pavements. Kubo, H., et al, [1987, p.493-510, eng] 41-4033
- Factor analyses of damage modes of asphalt pavements. Fukuda, T., et al, [1987, p.511-523, eng] 41-4034
- Use of rubber-modified asphalt pavements in cold regions. Takallou, H.B., et al, [1987, p.541-574, eng] 41-4036
- Polystyrene used in pavement subjected to low temperature. MacMaster, J.B., et al, [1987, p.575-618, eng] 41-4037
- Asphalt pavement durability improved by surface treatment. Anzaki, Y., et al, [1987, p.619-636, eng] 41-4038
- Consequences of deferred maintenance on transverse cracks. Chong, G.J., [1987, p.637-686, eng] 41-4039
- Crack sealing compounds in winter. Lupien, C., et al, [1987, p.689-718, eng] 41-4040
- Repair of pavement in tunnels (using precast reinforced concrete slabs). Suda, T., et al, [1987, p.719-733, eng] 41-4041
- Bituminous surface treatments in northern Canada. MacLeod, D.R., et al, [1987, p.735-772, eng] 41-4042
- Present situation and evaluation of *in-situ* surface and base recycling. Tada, H., et al, [1987, p.773-811, eng] 41-4043
- Characterization of recycled asphalt mixtures and their pavement performance. Yamada, M., [1987, p.813-828, eng] 41-4044
- Performance of high ratio recycled pavements in northern Ontario. McLuckie, R.F., et al, [1987, p.829-865, eng] 41-4045
- Recycling of pavement *in-situ* in Japan. Kohno, H., et al, [1987, p.867-892, eng] 41-4046
- In-place surface recycling on expressways. Tsuchiya, K., et al, [1987, p.893-915, eng] 41-4047
- New development in Japan's pavement management process. Enomoto, M., et al, [1987, p.917-948, eng] 41-4048
- Airport pavement distress in cold regions. Vinson, T.S., et al, [1987, p.981-1012, eng] 41-4050
- Summary of proper cold weather pavement repair methods. Eaton, R.A., [1987, p.1013-1027, eng] 41-4051
- Life cycle costing of paved Alaskan highways. Volume 1. Kulkarni, R., et al, [1982, 76p., eng] 41-1069



- Application of geotextiles in Alaska. Johnson, E.G., [1983, 64p., eng] 41-4071
- Rigid surfaces for roads and airports. Glushkov, G.I., et al., [1987, 255p., rus] 41-4151
- Rubber-modified pavements for ice control in Alaska. Paulson, A., [1987, 2p., eng] 41-4578
- Road subsurface drainage and frost action. Kozlov, G.S., [1984, 150p., eng] 41-4579
- Experimental study on prevention of differential frost heave by using Geogrid. Oayama, K., et al., [1985, p.179-186, jpn] 41-4586
- See also: Concrete pavements
- Paving**
- Polyethylene-modified bitumen for paving applications. Jew, P., et al., [1986, p.2685-2704, eng] 41-4829
- Paving in cold areas. [1987, 1027p. (2 vols.), eng] 41-4019
- Investigation on the straight asphalt properties of Japan. Iijima, T., et al., [1987, p.1-36, eng] 41-4020
- Selection of paving asphalt cements for low temperature service. Robertson, W.D., [1987, p.41-82, eng] 41-4021
- Paving asphalt temperature susceptibility. McLeod, N.W., [1987, p.147-240, eng] 41-4024
- Application of geotextiles in Alaska. Johnson, E.G., [1983, 64p., eng] 41-4071
- Peat**
- Regularities governing thermophysical properties of peat in the Tiumen' region. Danielian, I.U.S., et al., [1986, p.46-52, rus] 41-600
- Identification of regional features of West Siberian swamps on space photographs. Gorozhankina, S.M., [1986, p.29-37, rus] 41-817
- Strength and filtration properties of water-saturated peats in a detonation zone. Smirnov, A.G., et al., [1986, p.115-118, rus] 41-906
- Device for monitoring soil movement in peatlands. Nelson, F.E., [1986, p.275-281, eng] 41-1258
- Design of tall railroad embankments on weak bases. Vol'nov, M.V., et al., [1986, p.5-6, rus] 41-1530
- Peat inception and climatic change in northern Quebec. Payette, S., [1984, p.173-179, eng] 41-2006
- Aerial survey of a salt marsh: ice rafting to the lower intertidal zone. Hardwick-Witman, M.N., [1986, p.379-383, eng] 41-2244
- Age and evolution of soils in the USSR. Ivanov, I.V., ed., [1986, 230p., rus] 41-2352
- Buried soils of northeastern Yakutia (the Khallerchinskaya tundra). Fominykh, L.A., et al., [1986, p.109-120, rus] 41-2354
- Modeling of solute processes during freezing in peat and overlying water. Li, X.-M., [1986, 119p., eng] 41-2639
- Organic soils. Rubinshtein, A.I.A., [1986, 89p., rus] 41-2729
- Water saturation and transfer in geosystems from remote sensing data. Mandych, A.F., et al., [1986, p.45-55, rus] 41-2735
- Methane flux from northern peatlands. Harnas, R.C., et al., [1985, p.652-654, eng] 41-2744
- Biologic recultivation of industrial tailings in the Far North. Pereverzev, V.N., et al., [1986, 104p., rus] 41-2752
- Development of Holocene peat hummocks in northwestern Siberia. Vasil'chuk, I.U.K., et al., [1986, p.123-128, rus] 41-2828
- Cryogenic processes in the formation of swamp microrelief. Maksimova, L.N., et al., [1986, p.147-151, rus] 41-2833
- Interrelationships among components of biogeocenoses in southern taiga. Smirnov, A.V., ed., [1986, 120p., rus] 41-2898
- Role of fires in taiga paludification. Liakhova, I.G., [1986, p.75-80, rus] 41-2899
- Blasting work in ground and rocks. Kucheraviyt, F.I., ed., [1986, 128p., rus] 41-2903
- Peat excavation by blasting in channel construction. Frash, G.B., [1986, p.54-61, rus] 41-2905
- Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al., [1986, 95p., rus] 41-2911
- Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] 41-2962
- Changes in spring-flood runoff induced by forest swamp drainage. Pakutin, A.V., [1987, p.67-70, rus] 41-3082
- Peat formation of the Rutor Glacier (Aosta Valley). Results obtained by palynostratigraphic study of new peat outcrops near the glacier snout. Armando, E., et al., [1985, p.144-149, ita] 41-3182
- Freezing and thawing of drained peat soils in mountain forests. Chindiacu, A.S., [1987, p.60-64, rus] 41-3737
- Development of swamps and paluded forests in western Siberia. Efremov, S.P., et al., [1986, p.26-29, rus] 41-3743
- Multivariate regression analysis of the process of frozen peat dehydration. Aleksandrov, B.M., [1986, p.15-19, rus] 41-3766
- Nitrogen in two contrasting antarctic bryophyte communities. Christie, P., [1987, p.73-93, eng] 41-3795
- Sub-drainage systems in cryogenic peat soils. Loginov, I.I., et al., [1984, p.51-52, rus] 41-4089
- Soil-melioration studies in Karelia. Nesterenko, I.M., ed., [1986, 144p., rus] 41-4115
- Peat mineralization in Kola Peninsula and southern Karelia. Pereverzev, V.N., et al., [1986, p.64-72, rus] 41-4116
- Calcium in the peat soils of northern Europe. Sin'kevich, E.I., [1986, p.72-84, rus] 41-4117
- Experience in studying thermal properties of ground. Zaitsev, V.S., [1986, p.115-118, rus] 41-4466
- Current problems in humus formation. Archegova, I.B., ed., [1986, 172p., rus] 41-4563
- Humus profiles in the paludified loamy podzols of taiga. Vtiurin, G.M., [1986, p.78-88, rus] 41-4565
- Role of humus-formation processes in the development of soil profiles in Arctic deserts of October Revolution Island in Severnaya Zemlya. Govorenkov, B.F., [1986, p.126-135, rus] 41-4566
- Pedogenesis**
- See: Soil formation
- Pellets**
- See: Snow pellets
- Penetration**
- Role of sea ice motion in ice penetration. Denner, W.W., et al., [1986, p.135-153, eng] 41-2656
- Variability of Arctic sea ice drafts. Tucker, W.B., et al., [1986, p.237-256, eng] 41-2662
- Ice penetration drill/anchor using ultrahigh-pressure waterjets. Echert, D.C.S., et al., [1986, p.605-617, eng] 41-2679
- See also: Projectile penetration
- Penetration tests**
- Second Workshop on Ice Penetration Technology, 1986. [1986, 659p., eng] 41-2652
- Saline ice under explosive loads and penetration of sea ice. Larson, D.B., [1986, p.365-384, eng] 41-2666
- Ice penetrator scale model and full scale test results. Rychnovsky, R., [1986, p.385-414, eng] 41-2667
- Low-velocity impact penetration of an ice layer over water. Schmidt, R.M., et al., [1986, p.439-449, eng] 41-2669
- Ice penetrating buoy tests. Iddings, D.W., et al., [1986, p.451-460, eng] 41-2670
- Feasibility tests of autonomous antenna deployment through ice. Hrubes, J.D., et al., [1986, p.461-471, eng] 41-2671
- Kinematic model of ice penetration with lateral loading. Young, C.W., et al., [1986, p.473-479, eng] 41-2672
- Response of penetrators into ice targets. Kipp, R.J., et al., [1986, p.481-493, eng] 41-2673
- Thick ice penetrator. Swearingen, J.C., et al., [1986, p.495-520, eng] 41-2674
- Kinetic energy ice penetrating tactical sonobuoy. Everett, R.N., et al., [1986, p.521-547, eng] 41-2675
- Portable hot water ice drill. Tucker, W.B., et al., [1986, p.549-564, eng] 41-2676
- Water jet ice penetration. Gregory, W.E., et al., [1986, p.619-622, eng] 41-2680
- Project ice buster. Miles, R.T., et al., [1986, p.623-643, eng] 41-2681
- Deformation properties of washed-up sands under permafrost conditions. Bad'ianova, L.I., [1986, p.157-165, rus] 41-2835
- Revised guidelines for blasting floating ice. Mellor, M., [1986, 37p., eng] 41-3814
- Through the ice mining study—final report. Crawford, M.W., et al., [1983, 5 sections + append., eng] 41-3926
- Cone penetration tests of the sediments off Richards I., N.W.T. Kurfurst, P.J., [1987, p.939-944, eng] 41-4018
- Impact experiments in low-temperature ice. Lange, M.A., et al., [1987, p.506-518, eng] 41-4177
- Portable hot-water ice drill. Tucker, W.B., et al., [1987, p.57-64, eng] 41-4216
- Penetrometers**
- Determining strength characteristics of loose snow. Samoilov, R.S., [1985, p.101-103, eng] 41-1689
- Percussion drilling**
- Determining servomechanism parameters of drop-wedge percussive machines. Aranzon, M.I., et al., [1978, p.36-41, rus] 41-1317
- Energy distribution of drop-wedge percussive machines with servomechanism. Aranzon, M.I., [1978, p.41-47, rus] 41-1318
- Peretokots**
- Nival-glacial relief-forming processes in the BAM zone. Platinin, L.A., et al., [1986, p.82-86, rus] 41-3519
- Performance**
- See: Cold weather performance
- Periglacial processes**
- Climate and vegetation of Primor'e as affected by Pleistocene glaciation. Shumova, G.M., et al., [1986, p.157-161, rus] 41-126
- Micromorphology of soil during periglacial processes. Van Vliet-Lanoë, B., [1985, p.15-20, eng] 41-370
- Types of evolution and slope dynamics in North Labrador. André, M.F., [1985, p.81-94, fre] 41-375
- Dynamics of periglacial sorted circles in western Spitsbergen. Hallet, B., et al., [1986, p.81-99, eng] 41-792
- Sand-gravel pockets in the lower Seine valley: a status report. Chanceler, A., [1986, p.83-104, fre] 41-852
- Weathering pit development, Ottago Mts., New Zealand. Fahey, B.D., [1986, p.337-347, eng] 41-1181
- Turf-banked terraces in the Olympic Mountains, Washington, U.S.A. Hansen-Bristow, K.J., et al., [1985, p.261-270, eng] 41-1247
- Types and characteristics of modern periglacial along the Qinghai-Xizang Highway. Wang, S., [1986, p.149-158, chi] 41-1462
- Desiccation processes in the Werenskiöld Glacier forefield, W Spitsbergen. Cegla, J., [1986, p.5-24, eng] 41-1549
- Periglacial weathering of the mountain massifs, SW Spitsbergen. Martini, A., [1986, p.45-73, eng] 41-1551
- Limestone formation in periglacial and glacial areas. Chrobok, S.M., [1986, p.277-284, ger] 41-1565
- Present-day geomorphological processes on Prins Oscars Land, Svalbard. Rudberg, S., [1986, p.41-63, eng] 41-1845
- Morphoclimatic aspects of periglacial features, northern Scandinavia. Svensson, H., [1986, p.123-130, eng] 41-1870
- Periglacial processes, Banks Island, Canada. French, H.M., [1986, p.167-174, eng] 41-1875
- Focus: permafrost geomorphology. French, H.M., ed., [1986, p.358-366, eng] 41-2075
- Periglacial environments. Walker, H.J., [1986, p.82-96, eng] 41-2335
- Reconstruction of Little Ice Age events in the Canadian Rocky Mountains. Luckman, B.H., [1986, p.17-28, eng] 41-2703
- Holocene paleohydrology of the St. Elias Mountains, British Columbia and Yukon. Johnson, P.G., [1986, p.47-53, eng] 41-2706
- Occurrence of boulders of stromatolitic dolomite along St. Lawrence Estuary. Dionne, J.C., [1986, p.93-98, fre] 41-2708
- Mechanisms of mass movement in periglacial environments. Harris, C., [1987, p.531-559, eng] 41-3045
- Push-moraines and glacier-contact fans in marine and terrestrial environments. Boulton, G.S., [1986, p.677-698, eng] 41-3072
- Glacio-fluvial sediment transfer. Gurnell, A.M., ed., [1987, 524p., eng] 41-3124
- Arctic landforms: the formative processes. Bird, J.B., [1987, p.75-79, eng] 41-3234
- Report of the third Chinese conference on permafrost. Péwé, T.L., [1986, p.89-95, eng] 41-3529
- Definition of fossil periglacial zones and periglacial phenomena. Brochu, M., [1986, p.27-30, fre] 41-3578
- Geocryogenic regions of the Andes in Argentina. Corte, A.E., [1986, p.31-34, eng] 41-3579
- Periglacial morphology of volcanic outcrops. Derruau, M., [1986, p.47-62, fre] 41-3580
- Forms of periglacial erosion in Provence. Journaux, A., [1986, p.131-139, fre] 41-3582
- Relief and deposits of the Severnaya Zemlya islands. Makeev, V.M., et al., [1986, p.331-338, eng] 41-3625
- Human factors in the development of basic Arctic geosystems. Govorukha, L.S., [1986, p.24-30, rus] 41-3863
- Glacial and periglacial geology of Spitsbergen, Svalbard. Rowan, D.E., [1981, 115p., eng] 41-3892
- Permafrost and periglacial phenomena in West Kunlun Mountains of China. Li, S., [1987, p.103-109, eng] 41-3921
- Terrace scarp wind erosion in Arctic East Greenland. Swett, K., et al., [1987, p.45-52, eng] 41-4224
- Evidence for two zones of debris entrainment beneath the Greenland ice sheet. Sugden, D.E., et al., [1987, p.238-241, eng] 41-4227
- See also: Glacial deposits
- Periodic variations**
- Progress in pedology. Contributions of Soviet pedologists to the 13th International Congress of Pedologists, Hamburg, 1986. Kovda, V.A., ed., [1986, 270p., rus] 41-1743
- Nitrate flux on the Ross Ice Shelf and its relation to solar cosmic rays. Zeller, E.J., et al., [1986, p.1264-1267, eng] 41-2019
- Nitrate variability in South Pole and Ross Ice Shelf snow and firn. Laird, C.M., et al., [1985, p.68-69, eng] 41-2629
- Nitrate deposition in Antarctica; temporal and spatial variations. Laird, C.M., [1986, 268p., eng] 41-3155
- Periodic ice cliff avalanches, Ellesmere Island. Evans, D.J.A., et al., [1987, p.68-71, eng] 41-3598
- Permafrost**
- Cold region structural engineering. Eranti, E., et al., [1986, 529p., eng] 41-338
- Institute of Northern Engineering, 1985-1986 report. [1986, 48p., eng] 41-364
- Simulation of a multi-seam dragline operation in a sub-arctic mine. Bandopadhyay, S., et al., [1986, p.47-54, eng] 41-1027

**Permafrost (cont.)**

- Arctic research in the national interest. Washburn, A.L., et al, [1986, p.633-639, eng] 41-1033
- Northern Workshop, 1st, 1984; proceedings and abstracts. [1986, 74p., eng] 41-1034
- Hypersaline gradients in two Canadian High Arctic lakes. Stewart, K.M., et al, [1986, p.1795-1803, eng] 41-1222
- Alaska testlab: helping contractors avoid costly mistakes. [1984, p.36-40, eng] 41-1330
- Hydrotholosphere and subsurface ice on Mars. Battistini, R., [1983, p.607-617, eng] 41-1726
- Testing bearing strength of piles in permafrost by static penetration. Trofimenkov, I.U.G., et al, [1986, p.58-63, eng] 41-1850
- Origin of palsas. Seppälä, M., [1986, p.141-147, eng] 41-1872
- Safety measures for electric-power objects of the South Yakutia Task Economic Complex. Sedalishchev, V.A., et al, [1985, p.91-99, rus] 41-1926
- Experiences with High Arctic offstrip aircraft operations. Doyle, P., [1986, p.495-511, eng] 41-2041
- Bibliography and analytical data on North Slope. [1979, 60p., eng] 41-2193
- Workshop on Subsea Permafrost and Pipelines in Permafrost, 1985. [1986, 168p., eng] 41-2507
- Norman Wells Pipeline Project. Pick, A.R., [1986, p.61-66, eng] 41-2515
- Design of Norman Wells pipeline for frost-heave and thaw settlement. Nixon, J.F., et al, [1986, p.67-85, eng] 41-2516
- Quill Creek test facility. Fielder, D.E., [1986, p.86-115, eng] 41-2517
- Alaska Pipeline: monitoring, operations and maintenance. Johnson, E.R., [1986, p.126-132, eng] 41-2519
- Using the UBM-20A assembly for drilling large-diameter wells in permafrost. Minakov, V.M., et al, [1986, p.24-27, rus] 41-2533
- Formation of frozen rocks and forecasts of cryogenic processes. Kaplina, T.N., ed, [1986, 228p., rus] 41-2813
- On cryogenic formations. Kaplina, T.N., [1986, p.3-14, rus] 41-2814
- Regularities governing the salinity of frozen marine deposits. Dubikov, G.I., [1986, p.14-27, rus] 41-2815
- Temperature regime of artificial ice-bearing earth structures. Savilev, B.A., et al, [1986, p.166-168, rus] 41-2836
- Atlas of the polar regions. [1985, 66p., eng] 41-2884
- Using the blow-out method in open mining of placer deposits. Poplavskii, V.A., [1986, p.48-54, rus] 41-2904
- Drilling and slotting of ice and permafrost with water jets. Vijay, M.M., et al, [1986, p.177-187, eng] 41-2936
- Rotary trench excavators for permafrost. Bondarenko, V.P., [1987, p.15-16, rus] 41-3067
- Monitoring a sump containing drilling mud with a high salt content. Nenninger, R.D., [1987, 47p., eng] 41-3076
- Sensitivity of the arctic environment. French, H.M., [1987, p.154-163, eng] 41-3237
- Arctic National Wildlife Refuge, Alaska. [1987, 208p., maps, eng] 41-3362
- Forms of periglacial erosion in Provence. Journaux, A., [1986, p.131-139, fre] 41-3582
- Drilling and completion of water bearing layers in permafrost. Kvashnin, G.P., [1987, 247p. (Pertinent p.128-138), rus] 41-3666
- Construction of the Novosibirsk subway under severe climatic conditions. Romanov, V., et al, [1986, p.7-9, rus] 41-3738
- Some current problems in geocryology. Vtiurin, B.I., et al, [1972, p.17-25, rus] 41-3746
- Experience in casing wells in permafrost layers. Medvedskii, R.I., et al, [1987, p.62-65, rus] 41-3774
- Concrete lining of tunnels. Belkin, M.N., et al, [1987, p.63-67, rus] 41-3809
- Improving the performance of excavation equipment designed for the North. Primerov, S.N., et al, [1987, p.26-27, rus] 41-4122
- Permafrost distribution in central Canada: applications of a climate-based predictive model. Nelson, F.E., [1986, p.550-569, eng] 41-4137
- Rock failure under thermo-cyclic loads. Moskalev, A.N., et al, [1987, 248p., rus] 41-4152
- Foolproof sinking of piles into thawed and perennially frozen grounds. Novozhilov, G.F., [1987, 111p., rus] 41-4167
- Subzero engineering. Hills, A., [1986, p.52-56, eng] 41-4273
- Thermocarping features on Mars. Costard, F., [1986, p.123-131, fre] 41-4423
- Drilling bits for hard rocks. Kosobrodov, I.U.A., et al, [1986, p.61-65, rus] 41-4499
- Ice-wedge joints in the Severn estuary, S.W. Britain. Allen, J.R.L., [1987, p.109-118, eng] 41-4520
- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed, [1986, 81p., rus] 41-4546
- Selection of parameters for shaft pillars of placer mines. Panishev, V.V., [1986, p.7-10, rus] 41-4548
- New sampling technique for northern placer mines. Riabeta, N.I., et al, [1986, p.10-15, rus] 41-4549
- Suction dredges used in placer mining of the North. Vinchenko, V.V., [1986, p.15-19, rus] 41-4550
- Increasing safety of underground mining by using power driven equipment. Kivileva, N.M., [1986, p.25-30, rus] 41-4551
- Roof supports used in mines of permafrost areas. Efremov, A.P., et al, [1986, p.30-33, rus] 41-4552
- Ice-pillar roof supports in northern mines. Stoliarov, A.M., et al, [1986, p.38-47, rus] 41-4554
- Using fire-jet drills in permafrost. Sherstiuk, B.F., et al, [1986, p.8-10, rus] 41-4615
- Steam vibro-leading machines for drilling in permafrost. Gokhman, M.R., et al, [1986, p.20-23, rus] 41-4616
- Bibliography of hydrocarbon development in the Yukon region, Canada. Cameron, N.P., comp, [1986, 536p., eng] 41-4639
- See also: Continuous permafrost; Discontinuous permafrost; Sporadic permafrost; Subsea permafrost
- Permafrost bases**
- Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985). Sal'nikov, P.I., ed, [1985, 119p., rus] 41-276
- Improvement of structures, methods of design, and construction of railroad electrification, signalization and centralization block, and communication systems. Shurygin, V.P., ed, [1985, p.121p., rus] 41-1541
- Heat transfer between concrete power line supports and permafrost. Tsukanov, N.A., et al, [1985, p.21-32, rus] 41-1543
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Changes in physical and mechanical properties of frozen ground used as construction material. Liapin, V.E., et al, [1986, p.30-34, rus] 41-3443
- Influence of temperature regime and ice content on deformation of embankments built of coarse-clastic soils. Gavrilov, A.N., [1986, p.44-53, rus] 41-3445
- Cryogenic processes and the stability of tailing-dumps built on permafrost bases. Kuznetsov, G.I., [1986, p.67-75, rus] 41-3448
- Concrete foundations on permafrost. Mangus, A.R., [1987, p.40-42, eng] 41-3783
- Effect of dynamic action on compressibility of thawing sands. Inozemtsev, V.K., [1987, p.235-240, eng] 41-4165
- Establishing compressibility values of thawing permafrost. Maksimenko, E.S., et al, [1987, p.248-251, eng] 41-4166
- Computation of maximum permafrost temperatures in beds beneath buildings. Kononov, A.A., [1986, p.192-197, eng] 41-4366
- Experience and prospects of using self-contained steam-liquid cooling devices in construction on permafrost. Khrustalev, L.N., et al, [1983, p.3-12, rus] 41-4471
- Controlling temperature regime of frozen massive rocks in northern construction. Makarov, V.I., [1983, p.13-29, rus] 41-4472
- Using artificial cooling devices in permafrost areas. Gapeev, S.I., [1983, p.41-58, rus] 41-4474
- Using thermopiles for construction in the Vorkuta region. Aleksandrov, I.U.A., [1983, p.88-94, rus] 41-4479
- Developing and standardizing methods of determining the structural properties of frozen grounds. Sadovskii, A.V., et al, [1983, p.19-21, rus] 41-4482
- Experimental thawing of the permafrost base beneath the reconstructed main body of the Chita-I and electric power plant. Abashev, N.V., et al, [1986, p.9-10, rus] 41-4617
- Permafrost beneath lakes**
- Heat release during agitated water movement near the ice surface. Gogolev, E.S., et al, [1985, p.14-16, rus] 41-1816
- Interactions between artificial lakes and permafrost. Afanasenko, V.E., et al, [1986, p.120-127, rus] 41-2092
- Water resources of the BAM zone. Sokolov, A.A., [1986, 166p. (pertinent p.146-151), rus] 41-2228
- Calculation of permafrost thawing at the bottom of a water reservoir, accounting for settlement. Gogolev, E.S., et al, [1986, p.102-104, rus] 41-2545
- Changes in geocryological conditions of water-reservoir basins. Onikienko, T.S., [1986, p.83-88, rus] 41-3450
- All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] 41-3974
- Landscape conditions, hydrology and hydrochemistry of lakes in Central Priob'e. Tiul'kova, L.A., [1986, p.64-66, rus] 41-3977
- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed, [1985, 160p., rus] 41-4118
- Permafrost beneath oceans**
- See: Subsea permafrost
- Permafrost beneath rivers**
- Hydrology of the Baykal Amur Railroad area. Dobroumov, B.M., ed, [1986, 135p., rus] 41-420
- Economic development impact on river regimes in permafrost areas. Sokolov, B.L., [1986, p.3-11, rus] 41-421
- River ice cover and winter drainage in the BAM zone. Sokolov, B.L., et al, [1986, p.11-33, rus] 41-422
- Naleda, river ice covers and winter drainage in permafrost areas. Kravchenko, V.V., [1986, p.34-84, rus] 41-423
- Human factors impact on water resources and river regimes. Dobroumov, B.M., et al, [1986, p.84-93, rus] 41-424
- Studying soils and ground in the central BAM area. Vasilenko, N.G., et al, [1986, p.104-118, rus] 41-425
- Scheme for predicting flood runoff for unstudied rivers of Eastern Siberia. Petenkov, A.V., [1986, p.37-45, rus] 41-599
- Peculiarities of weathering and soil formation in forest tundra of the Northern Ob' Region. Liverovskaya, I.T., et al, [1986, p.58-63, rus] 41-1164
- Flora of overgrown gullies. Shishkina, L.P., [1986, p.67-70, rus] 41-1165
- Water supply and waste water dilution in permafrost regions. Kokovkin, A.V., [1986, p.57-67, rus] 41-1169
- Human factor impacts on Siberian floodplains during land reclamation. Malik, L.K., [1986, p.64-71, rus] 41-1367
- Formulas for calculating hydrologic characteristics of East Siberian rivers. Petenkov, A.V., [1986, p.132-136, rus] 41-1371
- Features of the Sagavanirktok River, Alaska. Hodel, K.L., [1986, 28p., eng] 41-1895
- Water resources of the BAM zone. Sokolov, A.A., [1986, 166p. (pertinent p.146-151), rus] 41-2228
- Geomorphology of river deltas on the Arctic coast of Siberia. Korotayev, V.N., [1986, p.139-147, eng] 41-2340
- Improving the map of spring-flood runoff layer of the Chukchi Peninsula rivers. Boiarintsev, E.L., [1986, p.8-17, rus] 41-2649
- Controlling filtration regimes of taliks beneath rivers by using pneumatic screens. Vasil'eva, I.A., et al, [1986, p.114-119, rus] 41-3454
- Maximum river runoff in the Anz'ra basin. Leksakova, V.D., [1987, 132p., rus] 41-4108
- Permafrost beneath roads**
- Railroad foundation freezing—hazard and prevention. Chao, Y., ed, [1984, 382p., chi] 41-982
- Alaska railroad between Anchorage and Fairbanks: guidebook to permafrost and engineering problems. Fuglestad, T.C., [1986, 82p., eng] 41-1573
- Road technology in cold regions of North America. Eorola, M., [1984, p.402-406, fin] 41-1938
- Subgrades and pavements in permafrost. Zhu, X., [1986, p.1-9, eng] 41-2197
- Life cycle costing of paved Alaskan highways. Volume 1. Kulkarni, R., et al, [1982, 76p., eng] 41-4069
- Interaction of gravel, surface drainage and culverts with permafrost. Brown, J., et al, [1984, 35p., eng] 41-4072
- Permafrost beneath structures**
- Safety measures for operating buildings erected on Chita permafrost. Orlov, V.O., et al, [1985, p.25-26, rus] 41-286
- Designing foundations for different ground conditions. Trofimovich, N.V., [1985, p.39-41, rus] 41-293
- Piles made of steel-fiber-concrete. Tupitsyna, V.N., [1985, p.48-49, rus] 41-299
- Hydrophobic coatings for diminishing concrete deterioration and frost-heave effects. Iarkin, I.G., et al, [1985, p.49-51, rus] 41-300
- Development of cryogenic processes in the central Transbaikalia. Shesternev, D.M., et al, [1985, p.74-76, rus] 41-311
- Computerized forecasting of cryogenic processes. Sozoniuk, V.V., [1985, p.112, rus] 41-332
- Floor surface temperature in residential buildings on slab foundations. Rudykh, O.L., et al, [1985, p.113-114, rus] 41-333
- Engineering surveys along the Trans-Alaska Pipeline. Godfrey, R.N., et al, [1986, 85p., eng] 41-799
- Canyon Creek bridge. Carlson, L., et al, [1986, p.43-47, eng] 41-827
- Lift-slab method of erecting a 30-story building in Krasnoyarsk. Mints, V.M., et al, [1986, p.14-16, rus] 41-888
- Experience gained in building electric substations in the Far North. Sosiak, N.V., [1986, p.2-3, rus] 41-908
- Substations 110 kv with the equipment housed in superblock structures. Ezrakhovich, L.O., [1986, p.3-6, rus] 41-909
- Substations 110/6-10 kv built in the Urengoy gas field area. Gaft, S.I.A., et al, [1986, p.6-7, rus] 41-910
- Distributing device 110 kv with mobile reel-carriage switches. Karpov, V.V., et al, [1986, p.9-10, rus] 41-912
- Electrical groundings in permafrost areas. Fel'dman, M.L., [1986, p.11-12, rus] 41-913
- Permafrost environment. Harris, S.A., [1986, 276p., eng] 41-955

- Influence of geocryological conditions of the construction site on the design of the Vilyuy Hydroelectric Power Plant No.3. Ziskovich, V.Kh., et al, [1986, p.53-55, rus] 41-987
- Transportation systems for new developments of the Far North. Vasiluk, V.A., [1986, p.74-79, rus] 41-1204
- Basic problems of power supply in the North. Ryl'akii, V.A., et al, [1986, p.86-93, rus] 41-1205
- Theoretical basis for planning northern cities. Panov, L.K., [1986, p.146-154, rus] 41-1206
- Examples of dam construction in Siberia and the Far North. Kolmogorov, R.I., [1973, p.53-62, rus] 41-1276
- Fourth International Conference on Permafrost, Fairbanks, 18-22 July 1983. Jahn, A., [1986, p.119-121, eng] 41-1346
- Power plant construction on permafrost. Shtel'man, A.Sh., [1986, p.8-12, rus] 41-1400
- Frame of the main building of the Neryungri power plant. Pavliukov, S.I., [1986, p.13-17, rus] 41-1401
- Thermophysical properties of ground containing coarse clastic inclusions. Gavril'ev, R.I., [1986, p.60-71, rus] 41-1538
- Microclimate and temperature-humidity regime of building enclosures in the North. Vas'kovskii, A.P., [1986, 165p., rus] 41-1681
- Bulletin of scientific-technical information. Power engineering of Southern Yakutia. Petrov, N.A., ed, [1984, 32p., rus] 41-1829
- Depth of sinking power-line support foundations. Argunov, L.I., [1984, p.11-13, rus] 41-1831
- Thermal melioration of ground by late-fall loosening. Stafcev, P.F., [1986, p.4-5, rus] 41-1886
- Bridge construction under severe climatic conditions. Vel'blat, B.M., et al, [1986, p.9-11, rus] 41-1887
- Light one-layer concrete enclosures designed for the North. Makarova, N.A., et al, [1986, p.36-37, rus] 41-1889
- Performance of the Zeya hydroelectric power plant dam during its initial period. Epifanov, A.P., et al, [1986, p.18-21, rus] 41-1919
- Construction of electric power substations in permafrost regions. Khomutov, V.A., et al, [1986, p.22-23, rus] 41-1920
- Concretes with unsorted sand-gravel for cold regions. Sadovich, M.A., et al, [1986, p.50-53, rus] 41-1924
- Development of power engineering in the Yakut ASSR related to the Baykal Amur Railroad construction. Collection of scientific papers. Petrov, N.A., ed, [1985, 101p., rus] 41-1925
- Geocryological research. Ershov, E.D., ed, [1986, 224p., rus] 41-2080
- Determining the scope of engineering-geological research in permafrost regions. Khrustalev, L.N., [1986, p.27-38, rus] 41-2083
- Geocryological mapping for regional surveying and design research. Garagulia, L.S., et al, [1986, p.38-45, rus] 41-2084
- Permafrost distribution and temperature from aerial surveys and spaceborne photography. Gavrilov, A.V., [1986, p.58-76, rus] 41-2086
- Sagging of thawing clayey grounds of different consistency. Khrustalev, L.N., et al, [1986, p.169-172, rus] 41-2097
- Calculating the amount of solar radiation heat reaching mine roads. Bazavluk, V.A., [1986, p.192-200, rus] 41-2100
- Ultimate design of foundations for permafrost bases. Pustovolt, G.P., [1986, p.218-223, rus] 41-2104
- Effective sectional road pavements for northern regions and Siberia. Karpov, B.N., et al, [1986, 96p., rus] 41-2211
- Water resources of the BAM zone. Sokolov, A.A., [1986, 166p. (pertinent p.146-151), rus] 41-2228
- Some problems in rationalizing the use of natural resources in the BAM zone. Mikhal'ov, I.U.P., [1986, p.35-44, rus] 41-2248
- Cryogenic deformations in reclaimed lands of the Khanka plain. Rai'ko, V.D., [1986, p.160-162, rus] 41-2251
- Improving the design of railroad routes. Turbinin, I.V., ed, [1984, 106p., rus] 41-2453
- Planning the distribution of settlements when designing railroads for little-explored regions. Bykov, I.U.A., et al, [1984, p.34-41, rus] 41-2454
- Designing routes for complicated geological and climatic conditions in plains. Skutin, A.I., [1984, p.66-74, rus] 41-2455
- Environmental protection of the North: a problem of national importance. Zabuzov, A.A., [1986, p.35-39, rus] 41-2560
- Building thawed-earth dams in northern climatic zone. Shat'ygin, V.A., [1986, p.80-83, rus] 41-2754
- Classification of means of ballasting and fastening pipelines. Vasil'ev, N.P., et al, [1986, p.20-21, rus] 41-2782
- Scientific-technical preparation for economic development of Yamal Peninsula. [1987, p.31-34, rus] 41-2784
- Bridge piers without grillage under complicated natural conditions. Kudriashov, V.I., et al, [1987, p.16-17, rus] 41-2793
- Structures of foundations designed for perennially frozen strongly deformable grounds. Kogodovskii, O.A., et al, [1986, p.29-32, rus] 41-2797
- Construction of steel reservoirs under northern conditions. Popovskii, B.V., [1985, p.28-34, rus] 41-2848
- Durability of metal structures of industrial buildings in Yakutia. Filippov, V.V., et al, [1985, p.37-47, rus] 41-2849
- Construction of electric power lines for main pipelines. Manual. Arnopolin, A.G., et al, [1986, 164p. (Pertinent p.127-138), rus] 41-2890
- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed, [1986, 81p., rus] 41-2916
- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, [1986, p.36-41, rus] 41-2918
- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] 41-2919
- Improving thermal insulation of building walls. Mordukhovich, I.M., et al, [1986, p.53-60, rus] 41-2920
- More precise definition of computed permafrost temperatures in beds of buildings and structures. Fedorovich, D.I., et al, [1986, p.188-192, eng] 41-2945
- Failure of frozen soils by high-pressure hydraulic jets in trench and pit construction. Petrosian, L.R., et al, [1986, p.194-197, eng] 41-2946
- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968
- Geotechnical research focuses on permafrost. [1986, p.9-10, eng] 41-2976
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Recommendations for the factory finishings of new standard house facades for northern towns. Kholopova, L.I., et al, [1986, 39p., rus] 41-3021
- Integrated groups of concrete-placing equipment in polar regions. Nesterov, V.V., et al, [1987, p.5-7, rus] 41-3065
- Construction of deep foundations. Glotov, N.M., et al, [1985, 248p., rus] 41-3125
- Geomechanical studies of power supply structure foundations. Saepgin, D.D., ed, [1985, 120p., rus] 41-3126
- Reducing the amount of construction materials needed under conditions of Siberia and the Far East. Nesterov, V.V., [1986, 136p., rus] 41-3157
- Pipelines and permafrost—science in a cold climate. Williams, P.J., [1986, 129p., eng] 41-3188
- Canadian Building Congress, 4th, 1985. [1985, 381p., eng] 41-3190
- Unforgiving North. Chill, R.W.C., et al, [1985, p.157-164, eng] 41-3191
- Permafrost control beneath gas pipelines. Nikonenko, I.S., et al, [1986, p.14-16, rus] 41-3206
- Evaluating the state of gas pipelines from space photographs. Aref'eva, E.M., et al, [1986, p.27-29, rus] 41-3212
- Revision of building codes for foundation construction on permafrost. Fedorovich, D.I., et al, [1987, p.144-146, eng] 41-3214
- Urban planning and construction problems in Siberia. Krushinskii, V.I., [1986, p.40-45, rus] 41-3259
- Thermal regime and stresses in concrete dams in permafrost areas. Epifanov, A.P., et al, [1987, p.35-37, rus] 41-3268
- Rational utilization and preservation of ground water in the Buryat ASSR. Rezanov, I.N., ed, [1986, 114p., rus] 41-3330
- Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR. Adushinov, A.A., [1986, p.52-59, rus] 41-3331
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] 41-3433
- Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000. Kudoiarov, L.I., [1986, p.13-23, rus] 41-3441
- Problems of engineering geocryology in hydraulic construction. Tsytovich, N.A., et al, [1986, p.23-29, rus] 41-3442
- Building hydraulic structures on perennially frozen rocks. Novikov, N.F., [1986, p.62-66, rus] 41-3447
- Cryogenic processes and the stability of tailing-dumps built on permafrost bases. Kuznetsov, G.I., [1986, p.67-75, rus] 41-3448
- Temperature and moisture regime of the Vilyuy power plant dam. Olovinn, B.A., [1986, p.151-161, rus] 41-3458
- Designing earth dams for permafrost regions. Anisimov, V.A., [1986, p.183-189, rus] 41-3461
- Report of the third Chinese conference on permafrost. Fewé, T.L., [1986, p.89-95, eng] 41-3529
- Mechanized laying of communication cables under difficult conditions. Kuz'menko, V.V., et al, [1987, 161p., rus] 41-3609
- Transportation in regions of new economic development. Prokof'eva, T.A., et al, [1986, 208p., rus] 41-3663
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, [1986, 328p., rus] 41-3664
- Operation of power equipment of gas pipelines in western Siberia. Ivanov, V.A., et al, [1987, 143p., rus] 41-3687
- Winter maintenance and testing of main pipelines. Zinov'ev, V.N., et al, [1987, p.29-31, rus] 41-3736
- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., [1987, 208p., rus] 41-3804
- Engineering preparations for construction of the Surgut Power Plant. Lutsiuk, I.V., et al, [1987, p.14-17, rus] 41-3808
- All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] 41-3974
- Interactions between "cold" gas pipelines and freezing ground. Mironov, N.G., et al, [1986, p.42-43, rus] 41-3976
- Environmental impact on motor vehicle transport in the North. Belinskii, B.V., [1986, p.168-169, rus] 41-3978
- Thermally induced heave beneath chilled pipelines in frozen ground. Nixon, J.F., [1987, p.260-266, eng] 41-4055
- Rigid surfaces for roads and airports. Glushkov, G.I., et al, [1987, 255p., rus] 41-4151
- Statistical modeling of pipeline interaction with the environment. Khrenov, N.N., [1987, p.40-43, rus] 41-4154
- Computation of maximum permafrost temperatures in beds beneath buildings. Kononov, A.A., [1986, p.192-197, eng] 41-4366
- Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed, [1983, 123p., rus] 41-4470
- Erection of residential buildings, without ventilated crawl spaces, in permafrost areas. Maksimov, G.N., et al, [1983, p.77-81, rus] 41-4477
- Interaction of thermopiles with artificially frozen bases. Mirenburg, I.U.S., et al, [1983, p.82-88, rus] 41-4478
- Using thermopiles for construction in the Vorkuta region. Aleksandrov, I.U.A., [1983, p.88-94, rus] 41-4479
- Using thermopiles in network construction. Smirnov, V.N., [1983, p.108-118, rus] 41-4481
- Research in building engineering. Structural thermodynamics. Service life of structures. Polonskii, V.P., ed, [1986, 179p., rus] 41-4500
- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., [1986, p.122-167, rus] 41-4502
- Formation and development of the Kola Mining Complex. Peshev, N.G., ed, [1986, 123p., rus] 41-4556
- Efficiency of producing and using lightweight concretes for construction in the Murmansk region. Nesterov, V.V., et al, [1986, p.62-67, rus] 41-4557
- Experimental thawing of the permafrost base beneath the reconstructed main body of the Chita-1 heat and electric power plant. Abashev, N.V., et al, [1986, p.9-10, rus] 41-4617
- Studying shear strength of ash-slag wastes from thermal power plants located in the Northern climatic zone. Ogarkov, A.A., [1987, p.75-78, rus] 41-4624
- Permafrost control**
- Influence of geocryological conditions of the construction site on the design of the Vilyuy Hydroelectric Power Plant No.3. Ziskovich, V.Kh., et al, [1986, p.53-55, rus] 41-987
- Studying heat and mass transfer in frozen ground around thermopiles. Nesterov, I.I., et al, [1986, p.1127-1130, rus] 41-2537
- Numerical methods for predicting and controlling thermal regime of rocks in permafrost areas. Izakson, V.I.U., et al, [1986, 94p., rus] 41-2745
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] 41-3013
- Physico-chemical processes of mining. Mathematical models of leaching ores and thawing frozen rocks. Ignatov, A.A., [1986, 97p., rus] 41-3015
- Permafrost control beneath gas pipelines. Nikonenko, I.S., et al, [1986, p.14-16, rus] 41-3206
- Recommendations for the design and construction of geocryogenic coolers. Kuz'min, G.P., et al, [1986, 66p., rus] 41-3329
- Prospects and problems of hydraulic power construction in the North. Bikanov, G.F., et al, [1986, p.5-12, rus] 41-3440
- Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed, [1983, 123p., rus] 41-4470
- Experience and prospects of using self-contained steam-liquid cooling devices in construction on permafrost. Khrustalev, L.N., et al, [1983, p.3-12, rus] 41-4471
- Controlling temperature regime of frozen massive rocks in northern construction. Makarov, V.I., [1983, p.13-29, rus] 41-4472
- Seasonally active ground cooling devices used in hydraulic construction. Buchko, N.A., [1983, p.29-40, rus] 41-4473
- Using artificial cooling devices in permafrost areas. Gapeev, S.I., [1983, p.41-58, rus] 41-4474

**Permafrost control (cont.)**

- Regularities governing the development of forms of artificially frozen zones obtained by seasonally active freezing devices. Koval'kov, V.P., [1983, p.58-71, rus] 41-4475
- Air-convection cooling devices. Konovalov, A.A., [1983, p.71-77, rus] 41-4476
- Erection of residential buildings, without ventilated crawl spaces, in permafrost areas. Maksimov, G.N., et al, [1983, p.77-81, rus] 41-4477
- Interaction of thermophiles with artificially frozen bases. Mirenburg, I.U.S., et al, [1983, p.82-88, rus] 41-4478
- Using thermophiles for construction in the Vorkuta region. Aleksandrov, I.U.A., [1983, p.88-94, rus] 41-4479
- Using thermophiles in cooling plastic frozen ground. Petrov, B.G., et al, [1983, p.94-107, rus] 41-4480
- See also: Permafrost preservation

**Permafrost depth**

- Improving the efficiency of geochemical exploration methods in taiga (8th Session of the Siberian branch of SGPM) summaries of reports. [1986, 240p., rus] 41-197
- Geochemical exploration in the northern taiga permafrost areas. Makarov, V.N., [1986, p.158-159, rus] 41-201
- Biochemical indications of gold-ore deposits in permafrost. Ursova, O.A., [1986, p.226-227, rus] 41-202
- Formula for calculating horizontal forces produced by thawing ground. Bondarenko, G.I., [1985, p.53-55, rus] 41-302
- Growth of Ibyuk Pingo, western Arctic coast, Canada. Mackay, J.R., [1986, p.68-80, eng] 41-791
- Artificial freezing of ground between permafrost and the active layer. Aleksandrov, I.U.A., [1986, p.7-8, rus] 41-911
- Meadow-chernozem cryogenic soils of the Buryat SSR. Kulikov, A.I., et al, [1986, 137p., rus] 41-1045
- Productivity of forest phytocenoses. Elagin, I.N., ed, [1984, 149p., rus] 41-1078
- Climatic influence on trees in permafrost areas. Dashkovskaya, I.S., et al, [1984, p.49-56, rus] 41-1079
- Influence of paludification and forest fires on forest development. Glebov, F.Z., et al, [1984, p.133-141, rus] 41-1083
- Flora of the Kanin Peninsula. Sergienko, V.G., [1986, 147p., rus] 41-1084
- Detection of high altitude permafrost, Jotunheimen, Norway. Harris, C., et al, [1986, p.19-26, eng] 41-1184
- Methods of studying solifluction in Franz Josef Land. Zhigarev, L.A., et al, [1986, p.120-129, rus] 41-1200
- Vegetation of southern tundras in western Taymyr Peninsula. Matveeva, N.V., et al, [1986, p.5-67, rus] 41-1332
- Soil algae in southern tundras of Taymyr. Sdobnikova, N.V., [1986, p.68-79, rus] 41-1333
- Forestry in permafrost regions. Pozdniakov, L.K., [1986, 192p., rus] 41-1343
- Hydrologic investigations of landscapes. Bachurin, G.V., ed, [1986, 208p., rus] 41-1365
- Productivity of natural meadows in the upper Angara River delta. Kas'ianova, L.N., et al, [1986, p.78-83, rus] 41-1404
- Landscape indication methods of interpretation used in forest tundra surveys. Kiuntsel', V.V., [1986, p.118-121, rus] 41-1539
- Snow cover effect on some cryogenic processes in the BAM zone. Poznanin, V.L., [1986, p.125-128, rus] 41-1652
- Geocryological characteristics of mountainous countries in Asia. Trush, N.I., [1986, p.99-108, rus] 41-2089
- Field studies of stresses in freezing ground in the active layer. Lebedenko, I.U.P., et al, [1986, p.163-169, rus] 41-2096
- Perennially frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation. Tong, B., et al, [1986, p.66-78, rus] 41-2541
- Interaction between cryolithozone and natural gases of the underground hydrosphere. Romanovskii, N.N., [1986, p.3-17, rus] 41-2543
- Structural-functional interrelationships and productivity of phytocenoses. Buzikin, A.I., ed, [1983, 140p., rus] 41-2746
- Estimating the productivity of stands in the lower Angara River area. Atkin, A.S., [1983, p.47-52, rus] 41-2747
- Mechanisms of birch adaptation to conditions of the North. Ermakov, V.I., [1986, 144p., rus] 41-2751
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed, [1986, 165p., rus] 41-2912
- New aquatic tundra plants. Vekhov, N.V., et al, [1986, p.1619-1620, rus] 41-3024
- Forest fire effect on tundra vegetation. Polozova, T.G., [1986, p.1657-1663, rus] 41-3025
- Isotopic composition and origin of lacustrine brines in the Arctic. Pagé, P., et al, [1987, p.210-216, eng] 41-4078
- Land reclamation under permafrost conditions. [1984, p.19-24, rus] 41-4484
- Permafrost distribution**
- Cryolithozone of Alpine deserts in Central Asia. Gorbunov, A.P., [1986, p.100-104, rus] 41-1114

- Improving the efficiency of geochemical exploration methods in taiga (8th Session of the Siberian branch of SGPM) summaries of reports. [1986, 240p., rus] 41-197
- Geochemical exploration in the northern taiga permafrost areas. Makarov, V.N., [1986, p.158-159, rus] 41-201
- Biochemical indications of gold-ore deposits in permafrost. Ursova, O.A., [1986, p.226-227, rus] 41-202
- Environmental protection in Central Yakutia (Collection of scientific papers). Vozin, V.F., ed, [1985, 143p., rus] 41-253
- Agricultural development of landscapes containing ground ice in Central Yakutia. Turbina, M.I., [1985, p.31-42, rus] 41-257
- Studying soils and ground in the central BAM area. Vasilenko, N.G., et al, [1986, p.104-118, rus] 41-425
- Arctic and subarctic construction: general provisions. Lobacz, E.F., [1986, 75p., eng] 41-663
- Calculating river runoff in arid and humid cold regions. Plitkin, G.A., et al, [1986, p.122-130, rus] 41-815
- Permafrost environment. Harris, S.A., [1986, 276p., eng] 41-955
- Influence of paludification and forest fires on forest development. Glebov, F.Z., et al, [1984, p.133-141, rus] 41-1083
- The living Earth. Agriculture and natural resources. Ushakov, S.A., ed, [1986, 167p., rus] 41-1163
- Detection of high altitude permafrost, Jotunheimen, Norway. Harris, C., et al, [1986, p.19-26, eng] 41-1184
- Vegetation of southern tundras in western Taymyr Peninsula. Matveeva, N.V., et al, [1986, p.5-67, rus] 41-1332
- Ground water level rise in Siberia and the Far North and East. Gospodinov, D.G., [1985, p.27-33, rus] 41-1363
- Natural water bodies as indicators of landscapes. Aseev, V.V., et al, [1986, p.75-80, rus] 41-1369
- Formulas for calculating hydrologic characteristics of East Siberian rivers. Petenkov, A.V., [1986, p.132-136, rus] 41-1371
- Productivity of natural meadows in the upper Angara River delta. Kas'ianova, L.N., et al, [1986, p.78-83, rus] 41-1404
- Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al, [1986, p.37-49, rus] 41-1537
- Landscape indication methods of interpretation used in forest tundra surveys. Kiuntsel', V.V., [1986, p.118-121, rus] 41-1539
- Snow cover effect on some cryogenic processes in the BAM zone. Poznanin, V.L., [1986, p.125-128, rus] 41-1652
- Subsurface ice and permafrost on Mars. Anderson, D.M., [1985, p.565-581, eng] 41-1724
- Modular construction of oil and gas industry objects. Manual. Batalin, I.U.P., ed, [1986, 576p., rus] 41-1746
- Influence of paleo-cryogenic microrelief on erosional processes and soil formation in the central Russian Plain. Velichko, A.A., et al, [1986, p.102-113, rus] 41-1823
- Morphoclimatic aspects of periglacial features, northern Scandinavia. Svensson, H., [1986, p.123-130, eng] 41-1870
- Zonation and ecology of high mountain permafrost in Scandinavia. King, L., [1986, p.131-139, eng] 41-1871
- Permafrost mounds in the Abisko area, northern Sweden. Akerman, H.J., et al, [1986, p.155-165, eng] 41-1874
- Climatic fluctuations and the peculiarities of Holocene permafrost development in the USSR. Maksimova, L.N., et al, [1986, p.45-58, rus] 41-2085
- Permafrost distribution and temperature from aerial surveys and spaceborne photography. Gavrilov, A.V., [1986, p.58-76, rus] 41-2086
- Geocryological characteristics of mountainous countries in Asia. Trush, N.I., [1986, p.99-108, rus] 41-2089
- Classifying northern areas according to fitness for mass construction. Nistratova, T.A., [1986, p.200-206, rus] 41-2101
- Water resources of the BAM zone. Sokolov, A.A., [1986, 166p. (pertinent p.146-151), rus] 41-2228
- Classification of exogenic relief-forming processes on land. Vyrlin, V.B., [1986, p.20-24, rus] 41-2247
- Arctic logistics and supporting services. Westerberg, T., et al, [1986, 16p., eng] 41-2283
- Cryolithozone of central Asia. Gorbunov, A.P., [1986, 57p., rus] 41-2349
- Permafrost and Quaternary history of the Mackenzie-Beaufort region. Judge, A.S., [1986, p.3-10, eng] 41-2508
- Review of subsea permafrost conditions along Alaska's coasts. Osterkamp, T.E., [1986, p.16-23, eng] 41-2510
- Impact of offshore permafrost on oil and gas production. Graham, C.A., [1986, p.35-47, eng] 41-2512
- Subsea permafrost: summary of discussion and research needs. [1986, p.48-49, eng] 41-2513
- Norman Wells Expansion Project—overview. Tibbatts, R.M., [1986, p.51-59, eng] 41-2514
- Ground ice. Shvetsov, P.F., et al, [1986, p.36-45, rus] 41-2534

- Perennially frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation. Tong, B., et al, [1986, p.66-78, rus] 41-2541
- Pseudomorphs of wedge ice in the Mayn River valley (Central Chukotskiy Peninsula). Kotov, A.N., [1986, p.54-62, rus] 41-2544
- Development and application of an upland boreal forest succession model. Moorhead, D.L., [1985, 170p., eng] 41-2584
- Coastal features of Canadian inland seas. Martini, I.P., [1986, p.117-142, eng] 41-2594
- Formula for calculating runoff in the Lena River basin. Nemerinskaya, Zh.N., [1986, p.3-8, rus] 41-2648
- Improving the map of spring-flood runoff layer of the Chukchi Peninsula rivers. Boiarintsev, E.L., [1986, p.8-17, rus] 41-2649
- Estimating the productivity of stands in the lower Angara River area. Atkin, A.S., [1983, p.47-52, rus] 41-2747
- Radial growth of conifers in different Angara River forest areas. Dashkovskaya, I.S., [1983, p.82-94, rus] 41-2748
- Mechanisms of birch adaptation to conditions of the North. Ermakov, V.I., [1986, 144p., rus] 41-2751
- Designing moorings built of fused enlarged blocks. Goncharov, V.V., et al, [1986, p.25-26, rus] 41-2788
- On cryogenic formations. Kaplina, T.N., [1986, p.3-14, rus] 41-2814
- Cryogenic structure of sedimentary mantle in central Yakutian lowlands. Gravis, G.F., et al, [1986, p.60-65, rus] 41-2820
- Cryogenic structure of linear weathering crusts in the Stanovoi Range. Mikhlaev, S.M., et al, [1986, p.74-78, rus] 41-2822
- Development and regime of thermal erosion in the BAM zone. Poznanin, V.L., [1986, p.138-142, rus] 41-2831
- Landscape approach to forecasting cryogenic processes. Stashenko, A.I., [1986, p.191-199, rus] 41-2840
- Organizing construction of the Kureyskaya hydroelectric power plant. Zal'taman, O.M., et al, [1986, p.17-23, rus] 41-2864
- Engineering geology in construction. Ziangirov, R.S., et al, [1986, 175p., rus] 41-2889
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed, [1986, 165p., rus] 41-2912
- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, [1986, p.36-41, rus] 41-2918
- Regionalization and mapping of permafrost. Trofimov, V.T., et al, [1985, p.66-72, rus] 41-2970
- Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, [1987, 144p., rus] 41-2983
- Permafrost rocks of the Tsinkhai-Sizang plateau of Tibet and their formation conditions. Tong, B., et al, [1986, p.68-79, eng] 41-3017
- Biochemical anomalies in permafrost zone and their interpretation. Lobanova, A.B., [1987, p.170-172, eng] 41-3163
- Maps of technogenic thermokarst development potential. Parmuzin, S.I.U., et al, [1986, p.184-193, eng] 41-3198
- Regionalization of the Yakut ASSR for determining depths of placing geodetic markers. Bogdanov, B.G., [1986, p.30-31, rus] 41-3213
- Geophysics and man-induced changes of landscapes in the Chukotskiy Peninsula. Ignatenko, I.V., et al, [1987, 271p., rus] 41-3247
- Urban planning and construction problems in Siberia. Krushlinskii, V.I., [1986, p.40-45, rus] 41-3259
- Water resources of the Yakut ASSR and their use. Nogovitsyn, D.D., [1985, 124p., rus] 41-3432
- Mapping permafrost in the boreal forest. Morrissey, L.A., et al, [1986, p.1513-1520, eng] 41-3472
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481
- Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains. Severskii, I.V., et al, [1986, p.29-38, rus] 41-3484
- Map of distribution and discontinuity of permafrost in western Siberia. Fotiev, S.M., [1986, p.38-52, rus] 41-3485
- Allowing for the most recent tectonics in geocryological mapping of western Siberia. Belopukhova, E.B., et al, [1986, p.67-78, rus] 41-3487
- Differentiations of seasonally and perennially frozen rocks in Severnoe Priamur'e. Pozdniakov, I.V., [1986, p.96-106, rus] 41-3490
- Methods of evaluating and mapping the susceptibility of cryogenic landscapes. Fedorov, A.N., et al, [1986, p.121-133, rus] 41-3493
- On the origin of aggradational ice in permafrost. Burn, C.R., [1986, 222p. + append., eng] 41-3507
- Use of satellite information in studying distribution of discontinuous permafrost. Dorofeev, I.V., et al, [1986, p.55-59, rus] 41-3518
- Report of the third Chinese conference on permafrost. Péwé, T.L., [1986, p.89-95, eng] 41-3529



- Prospects for using oxygen isotope determinations in paleogeocryological reconstructions. Vasil'chuk, I.U.K., et al, (1985, p.64-65, rus) 41-3535
- Geocryogenic regions of the Andes in Argentina. Corte, A.E., (1986, p.31-34, eng) 41-3579
- Permafrost along the Cordillera of North America. Harris, S.A., (1986, p.107-118, eng) 41-3581
- Permafrost advances: report of the fourth International Conference on Permafrost. Péwé, T.L., (1986, p.223-233, eng) 41-3583
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, (1987, 166p., rus) 41-3649
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, (1987, p.4-65, rus) 41-3650
- Southern boundary of permafrost distribution within the West Siberian Plain. Trofimov, V.T., et al, (1986, p.106-113, rus) 41-3776
- Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, (1986, 136p., rus) 41-3805
- Permafrost distribution and slope processes in central Tien Shan. Tarakanov, A.G., (1986, p.98-109, rus) 41-3807
- Comparison of leaf and canopy reflectance of subarctic forests. Kodama, Y., et al, (1986, p.809-811, eng) 41-3848
- Hydrometeorological regime and dynamics of Lake Issyk-Kul'. Pomortsev, O.A., ed, (1988, 153p., rus) 41-3870
- Significance of rock glaciers in the formation and development of lakes in the Tien Shan highlands. Tarakanov, A.G., (1985, p.137-145, rus) 41-3871
- Glacial and periglacial geology of Spitsbergen, Svalbard. Rowan, D.E., (1981, 115p., eng) 41-3892
- Permafrost and periglacial phenomena in West Kunlun Mountains of China. Li, S., (1987, p.103-109, eng) 41-3921
- All-Union conference on geographic problems in regions of new economic development. Summaries of reports. (1986, 172p., rus) 41-3974
- Regionalization of the permafrost zone for environmental protection purposes. Chizhov, A.V., et al, (1986, p.39, rus) 41-3975
- Environmental impact on motor vehicle transport in the North. Belinskii, B.V., (1986, p.168-169, rus) 41-3978
- Frozen tailings pond dams. LaFlèche, P.T., et al, (1987, p.191-197, eng) 41-4012
- Conference of geologists from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. (1986, 166p., rus) 41-4060
- Geocryological regionalization of the Far Eastern economic region. Shats, M.M., (1986, p.71, rus) 41-4066
- Maximum river runoff in the Angara basin. Leksakova, V.D., (1987, 132p., rus) 41-4108
- Thermal regime of upper soil layers in the Kolyma Basin. Alfimov, A.V., (1985, p.9-29, rus) 41-4119
- Changes induced by industrial activities in the Upper Kolyma basin. Grigor'eva, N.N., et al, (1986, p.9-13, rus) 41-4467
- Land reclamation under permafrost conditions. (1984, p.19-24, rus) 41-4484
- Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., (1986, 78p., rus) 41-4523
- Prospects and possible consequences of hydraulic meliorations in western Siberia. Malik, L.K., (1986, p.77-89, rus) 41-4573
- Discussion on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al, (1987, p.120, rus) 41-4623
- Permafrost forecasting**
- Methods of predicting destructive cryogenic phenomena associated with the development of an area from the example of NW Siberia. Mel'nikov, P.I., et al, (1986, p.44-49, eng) 41-1791
- Geocryological mapping for regional surveying and design research. Garagulia, L.S., et al, (1986, p.38-45, rus) 41-2084
- Formation of frozen rocks and forecasts of cryogenic processes. Kaplina, T.N., ed, (1986, 228p., rus) 41-2813
- Discussion on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al, (1987, p.120, rus) 41-4623
- Permafrost formation**
- See: Permafrost origin
- Permafrost heat balance**
- Stability study of CRREL permafrost tunnel. Huang, S.L., et al, (1986, p.777-790, eng) 41-230
- Permafrost heat transfer**
- Permafrost thermal properties in the Alaskan Arctic. Lachenbruch, A.H., et al, (1986, p.689-696, eng) 41-1254
- Thermal properties of soils. Farouki, O.T., (1986, 136p., eng) 41-2973
- Ablation of exposed ground ice. Lewkowicz, A.G., (1986, p.511-519, eng) 41-4306
- Permafrost hydrology**
- Characteristics of naled fields. Sokolov, B.L., (1986, p.138-147, rus) 41-123
- Hydrologic investigations in the Mimer River basin (Spitsbergen) in 1983. Gokhman, V.V., et al, (1986, p.161-166, rus) 41-127
- Environmental protection in Central Yakutia (Collection of scientific papers). Vozin, V.F., ed, (1985, 143p., rus) 41-253
- Hydrochemical regime of lake and suprapermafrost ground water in alassy. Shishkina, N.P., (1985, p.110-130, rus) 41-258
- Influence of suprapermafrost ground waters on the active layer. Pichuev, V.V., (1985, p.86-87, rus) 41-317
- Hydrology of the Baykal Amur Railroad area. Dobroumov, B.M., ed, (1986, 135p., rus) 41-420
- Economic development impact on river regimes in permafrost areas. Sokolov, B.L., (1986, p.3-11, rus) 41-421
- River ice cover and winter drainage in the BAM zone. Sokolov, B.L., et al, (1986, p.11-33, rus) 41-422
- Naleds, river ice covers and winter drainage in permafrost areas. Kravchenko, V.V., (1986, p.34-84, rus) 41-423
- Human factors impact on water resources and river regimes. Dobroumov, B.M., et al, (1986, p.84-93, rus) 41-424
- Permafrost. Benson, C., et al, (1986, p.99-106, eng) 41-476
- Studying hydrographic indices of rivers in the Irtysh area taiga. Trofimova, E.V., (1986, p.66-71, rus) 41-812
- Meadow-chenozem cryogenic soils of the Buryat SSR. Kulikov, A.I., et al, (1986, 137p., rus) 41-1045
- Peculiarities of weathering and soil formation in forest tundra of the Northern Ob' Region. Liverovskaia, I.T., et al, (1986, p.58-63, rus) 41-1164
- Flora of overgrown gullies. Shishkina, L.P., (1986, p.67-70, rus) 41-1165
- Forestry in permafrost regions. Pozdniakov, L.K., (1986, 192p., rus) 41-1343
- Alassy as indicators of soil moisture. Bosikov, N.P., (1986, p.80-85, rus) 41-1370
- Formulas for calculating hydrologic characteristics of East Siberian rivers. Petenkov, A.V., (1986, p.132-136, rus) 41-1371
- Some modeling problems related to the theory of naleds. Dement'eva, O.V., (1982, p.162-165, rus) 41-1443
- Methods of predicting destructive cryogenic phenomena associated with the development of an area from the example of NW Siberia. Mel'nikov, P.I., et al, (1986, p.44-49, eng) 41-1791
- Origin of some buried ice forms in the Yamal tundra. Krass, M.S., et al, (1986, p.66-75, rus) 41-1793
- Structure of the water balance of river drainage basins in the permafrost zone. Vasilenko, N.G., et al, (1986, p.326-330, eng) 41-1891
- Quaternary glaciations of Central Siberia. Velichko, A.A., ed, (1986, 121p., rus) 41-1906
- Origin and stratigraphic position of thick ground-ice layers in the Ledyanaya Gora outcrop. Karpov, E.G., (1986, p.73-78, rus) 41-1907
- Geocryological research. Ershov, E.D., ed, (1986, 224p., rus) 41-2080
- Compiling maps for evaluating potential thermokarst sagging. Garagulia, L.S., et al, (1986, p.77-95, rus) 41-2087
- Mapping the distribution of polluted ground water in cryogenic hydrogeological structures. Volkova, V.P., et al, (1986, p.95-99, rus) 41-2088
- Interactions between artificial lakes and permafrost. Afanasenko, V.E., et al, (1986, p.120-127, rus) 41-2092
- Vertical electrical soundings in the vicinity of extended taliks. Boikov, S.A., et al, (1986, p.172-180, rus) 41-2098
- Karst ground water activity in permafrost of Canada. Ford, D.C., (1984, p.340-350, eng) 41-2118
- Water resources of the BAM zone. Sokolov, A.A., (1986, 166p. (pertinent p.146-151), rus) 41-2228
- Classification of exogenic relief-forming processes on land. Vykrin, V.B., (1986, p.20-24, rus) 41-2247
- Cryolithozone of central Asia. Gorbunov, A.P., (1986, 57p., rus) 41-2349
- Ground ice. Shvetsov, P.F., et al, (1986, p.36-45, rus) 41-2534
- Criteria indicating the presence of taliks in permafrost. Petrova, R.G., (1986, p.49-53, rus) 41-2536
- Interaction between cryolithozone and natural gases of the underground hydrosphere. Romanovskii, N.N., (1986, p.3-17, rus) 41-2543
- Environmental protection of the North: a problem of national importance. Zabuzov, A.A., (1986, p.35-39, rus) 41-2560
- Hydrology of a wetland in the continuous permafrost region. Roulet, N.T., et al, (1986, p.73-91, eng) 41-2700
- Cryogenic structure of sedimentary mantle in central Yakutian lowlands. Gravis, G.F., et al, (1986, p.60-65, rus) 41-2820
- Waters in active layers and naled formation. Poznanin, V.L., (1986, p.142-147, rus) 41-2832
- Basic structures of the Kureyskaya hydroelectric plant. Makarov, V.A., et al, (1986, p.11-17, rus) 41-2863
- Engineering geology in construction. Ziangirov, R.S., et al, (1986, 175p., rus) 41-2889
- Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, (1987, 144p., rus) 41-2983
- Life upon the permafrost. Bruemmer, F., (1987, p.30-39, eng) 41-3148
- Biochemical anomalies in permafrost zone and their interpretation. Lobanova, A.B., (1987, p.170-172, eng) 41-3163
- Remote sensing and hydrologic models. Peck, E.L., et al, (1982, 179p., eng) 41-3256
- Cryolithozone and ground water. Nekrasov, I.A., (1987, p.116-118, rus) 41-3398
- Water resources of the Yakut ASSR and their use. Nogovitsyn, D.D., (1985, 124p., rus) 41-3432
- Engineering geocryology in hydraulic construction. Bianov, G.F., ed, (1986, 205p., rus) 41-3439
- Controlling filtration regimes of taliks beneath rivers by using pneumatic screens. Vasil'eva, I.A., et al, (1986, p.114-119, rus) 41-3454
- Problems of geocryological mapping. Grave, N.A., ed, (1986, 172p., rus) 41-3481
- Map of distribution and discontinuity of permafrost in western Siberia. Fotiev, S.M., (1986, p.38-52, rus) 41-3485
- Regionalization of northwestern Siberia according to thermokarst development. Parmuzin, S.I.U., (1986, p.78-85, rus) 41-3488
- Mapping frozen strata in troughs of the BAM zone. An, V.V., et al, (1986, p.106-113, rus) 41-3491
- Remote sounding and interpretation of cryo-hydro-geochemical anomalies. Makarov, V.N., et al, (1986, p.133-144, rus) 41-3494
- Investigation of permafrost and climate change. (1986, var.p., eng) 41-3506
- Hydrological investigations in the Mimer River basin, Svalbard, in 1983. Gokhman, V.V., et al, (1986, p.309-316, eng) 41-3622
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, (1987, 166p., rus) 41-3649
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, (1987, p.4-65, rus) 41-3650
- Subsurface ice-lens formation by the refreezing of taliks. Gravis, G.F., et al, (1972, p.73-79, rus) 41-3748
- Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, (1986, 136p., rus) 41-3805
- Water supply in populated points of northern regions. Pavlov, G.D., et al, (1987, p.6-8, rus) 41-3934
- Water supply and sewage disposal in the Yamal Peninsula. Kataev, V.V., et al, (1987, p.8-9, rus) 41-3935
- Maximum river runoff in the Angara basin. Leksakova, V.D., (1987, 132p., rus) 41-4108
- Heat balance of the non-chenozem zone of Russia. Nesmelova, E.I., et al, (1987, p.54-60, rus) 41-4168
- Using thermopiles in cooling plastic frozen ground. Petrov, B.G., et al, (1983, p.94-107, rus) 41-4480
- Land reclamation under permafrost conditions. (1984, p.19-24, rus) 41-4484
- Reciprocal influence of underground and open mining under permafrost conditions. Los', I.N., (1986, p.33-37, rus) 41-4553
- Permafrost indicators**
- Sand-gravel pockets in the lower Seine valley: a status report. Chanceler, A., (1986, p.83-104, frej) 41-852
- Permafrost origin**
- Behavior of frost susceptible soils in industrial regions. Shpolianskaia, N.A., et al, (1985, p.103-105, rus) 41-326
- Quaternary glaciations of Central Siberia. Velichko, A.A., ed, (1986, 121p., rus) 41-1906
- Origin and stratigraphic position of thick ground-ice layers in the Ledyanaya Gora outcrop. Karpov, E.G., (1986, p.73-78, rus) 41-1907
- Pleistocene glaciations in East Asia. Bepalyi, V.G., ed, (1984, 212p., rus) 41-1910
- Geocryological research. Ershov, E.D., ed, (1986, 224p., rus) 41-2080
- Geocryology--its subject and problems. Danilov, I.D., (1986, p.18-26, rus) 41-2082
- Climatic fluctuations and the peculiarities of Holocene permafrost development in the USSR. Maksimova, L.N., et al, (1986, p.45-58, rus) 41-2085
- Origin of Edoma deposits. Zhestkova, T.N., et al, (1986, p.108-113, rus) 41-2090
- Cryolithozone of central Asia. Gorbunov, A.P., (1986, 57p., rus) 41-2349
- Age and evolution of soils in the USSR. Ivanov, I.V., ed, (1986, 230p., rus) 41-2352
- Modern concept of soil cryogenesis, the evolution of cryogenic soils in Holocene and problems of land reclamation in the presence of permafrost. Makeev, O.V., (1986, p.37-46, rus) 41-2353
- Pseudomorphs of wedge ice in the Mayn River valley (Central Chukotskiy Peninsula). Kotov, A.N., (1986, p.54-62, rus) 41-2544

**Permafrost origin (cont.)**

- Formation of frozen rocks and forecasts of cryogenic processes. Kaplina, T.N., ed, [1986, 228p., rus] 41-2813
- On cryogenic formations. Kaplina, T.N., [1986, p.3-14, rus] 41-2814
- Dislocations in frozen, ice-containing, Pleistocene deposits of northern western Siberia. Danilov, I.D., [1986, p.28-41, rus] 41-2816
- Variabilities in engineering-geological conditions in NW Siberia. Goral'chuk, M.I., et al, [1986, p.41-46, rus] 41-2817
- Thickness and temperature of permafrost in Kular Range. Sheshin, I.U.B., et al, [1986, p.47-50, rus] 41-2818
- Influence of neotectonics on the development of cryogenic formations. Sukhov, A.G., et al, [1986, p.103-115, rus] 41-2826
- Glaciers, subglacial taliks and perennally frozen rocks. Romanovskii, N.N., et al, [1986, p.206-219, rus] 41-2842
- Permafrost rocks of the Tsinkhai-Sizan plateau of Tibet and their formation conditions. Tong, B., et al, [1986, p.68-79, eng] 41-3017
- Pale yellow soils of the central Siberian Plateau. Sokolov, I.A., [1986, p.25-38, rus] 41-3083
- Geophysics and man-induced changes of landscapes in the Chukotskiy Peninsula. Ignatenko, I.V., et al, [1987, 271p., rus] 41-3247
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] 41-3249
- Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed, [1986, 165p., rus] 41-3428
- Dilochations and permafrost development in the Pleistocene deposits of northern USSR. Popov, A.I., [1986, p.146-153, rus] 41-3429
- Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] 41-3771
- Permafrost physics**
- Blasting frozen ground in proximity of buildings and power plants. Toropov, V.V., [1986, p.42-44, rus] 41-512
- Pingos—a not so open and closed case. Waddington, C.K., [1985, p.30-52, eng] 41-578
- Permafrost and ice-wedge growth. Worsley, P., [1986, p.683-684, eng] 41-615
- Growth mechanisms in aggradation palsas. Outcalt, S.I., et al, [1984, p.65-78, eng] 41-626
- Mechanical and dynamic properties and behaviour of polycrystalline ice. Yousef, H., [1986, p.283-298, eng] 41-1102
- Freezing effect on seismic movement. Zimmernan, R.W., et al, [1986, p.1285-1290, eng] 41-1213
- Pingo ice of the western Arctic coast, Canada. Mackay, J.R., [1985, p.1452-1464, eng] 41-1253
- Studying hydraulic drive of drilling equipment at low temperatures. Makushkin, D.O., et al, [1978, p.63-68, rus] 41-1323
- Fourth International Conference on Permafrost, Fairbanks, 18-22 July 1983. Jahn, A., [1986, p.119-121, eng] 41-1346
- Remarks on the origin of palsa frost mounds. Jahn, A., [1986, p.123-130, eng] 41-1347
- Report of activities, 1984-1985. [1986, 21p., eng] 41-1678
- Focus: Permafrost geomorphology. French, H.M., ed, [1986, p.358-366, eng] 41-2075
- Geocryological research. Ershov, E.D., ed, [1986, 224p., rus] 41-2080
- Ultimate design of foundations for permafrost bases. Pustovoi, G.P., [1986, p.218-223, rus] 41-2104
- Behavior of laterally loaded piles in permafrost. Neukirchner, R.J., et al, [1987, p.1-14, eng] 41-2115
- Analysis of laterally loaded piles in permafrost. Neukirchner, R.J., [1987, p.15-29, eng] 41-2116
- Periglacial environments. Walker, H.J., [1986, p.82-96, eng] 41-2335
- International Offshore Mechanics and Arctic Engineering Symposium, 1987. [1987, 4 vols., eng] 41-2394
- In situ creep properties in ice-rich permafrost soil. Savigny, K.W., et al, [1986, p.504-514, eng] 41-2470
- Creep behaviour of undisturbed clay permafrost. Savigny, K.W., et al, [1986, p.515-527, eng] 41-2471
- Permafrost and Quaternary history of the Mackenzie-Beaufort region. Judge, A.S., [1986, p.3-10, eng] 41-2508
- Drilling and sampling offshore permafrost. Ruffell, J.P., [1986, p.11-15, eng] 41-2509
- Review of subsea permafrost conditions along Alaska's coasts. Osterkamp, T.E., [1986, p.16-23, eng] 41-2510
- Engineering properties of permafrost. Ladanyi, B., [1986, p.24-33, eng] 41-2511
- Temperature and time effects on the closure of a gravel room in permafrost. Huang, S.L., [1985, p.53-65, eng] 41-2743
- Numerical methods for predicting and controlling thermal regime of rocks in permafrost areas. Izakson, V.I.U., et al, [1986, 94p., rus] 41-2745
- Engineering geology in construction. Ziangirov, R.S., et al, [1986, 175p., rus] 41-2889
- Construction of electric power lines for main pipelines. (Manual. Artnopolin, A.G., et al, [1986, 164p. Perennial. 127-138, rus] 41-2890
- Blasting work in ground and rocks. Kucheriavt, F.I., ed, [1986, 128p., rus] 41-2903
- Using lesser diameter charges in blasting frozen placer deposits. Shchegolev, S.V., [1986, p.81-85, rus] 41-2907
- Geotechnical research focuses on permafrost. [1986, p.9-10, eng] 41-2976
- Engineering geocryology in hydraulic construction. Bianov, G.F., ed, [1986, 205p., rus] 41-3439
- Problems of engineering geocryology in hydraulic construction. Tsytovich, N.A., et al, [1986, p.23-29, rus] 41-3442
- Engineering and geological conditions of construction and operation of hydraulic structures built on perennally frozen hard rocks. Kagan, A.A., et al, [1986, p.34-44, rus] 41-3444
- Geophysical research for the construction of hydraulic structures in permafrost areas. Kondrashkin, A.V., et al, [1986, p.76-83, rus] 41-3449
- Preparation of geophysical borehole site with ground ice. Fairbanks, A.K. Delaney, A.J., [1987, 15p., eng] 41-3627
- Observations and predictions of frost heave around a chilled pipeline. Dallimore, S.R., [1985, 110p., eng] 41-3647
- Construction of the Novosibirsk subway under severe climatic conditions. Romanov, V., et al, [1986, p.7-9, rus] 41-3738
- Frost heave in permafrost. Mackay, J.R., et al, [1987, p.37-41, eng] 41-4008
- Using thermopiles in cooling plastic frozen ground. Petrov, B.G., et al, [1983, p.94-107, rus] 41-4480
- Naturally occurring creep in ice-rich permafrost. Savigny, K.W., [1980, 355p., eng] 41-4596
- Investigations on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al, [1987, p.120, rus] 41-4623
- Slit- and borehole charges for permafrost excavation. Il'ko, A.A., [1987, p.18-19, rus] 41-4625
- Permafrost preservation**
- Sewage treatment in Yellowknife, N.W.T. Soniassy, R.N., et al, [1986, p.129-139, rus] 41-350
- Response of permafrost to disturbance. Lawson, D.E., [1986, p.1-7, eng] 41-1183
- Environmental impact analysis process (Pt.2). Brown, V.G., [1987, Var.p., eng] 41-3009
- Concrete foundations on permafrost. Mangus, A.R., [1987, p.40-42, eng] 41-3783
- See also: Permafrost control
- Permafrost structure**
- Possibilities of oxygen-isotope technique in studying ground ice. Arkhangelov, A.A., et al, [1986, p.88-92, rus] 41-111
- Significance of variations in ice-wedge forms. Vtiurina, E.A., et al, [1986, p.190-194, rus] 41-1333
- Agricultural development of landscapes containing ground ice in Central Yakutia. Turbina, M.I., [1985, p.31-42, rus] 41-257
- Problems of ecology and environmental protection (Collections of papers of the First Republican Conference), Vol.1. [1983, 292p., rus] 41-519
- Underground storage of petroleum products in the Far North. Braiko, V.N., et al, [1983, p.107-109, rus] 41-520
- Loess deposits of the USSR. Sergeev, E.M., ed, [1986, 2 volumes (only Vol.2 studying material), rus] 41-620
- Physical methods of determining material used in railroad technology. Vereshchagin, I.K., ed, [1982, 135p., rus] 41-1273
- Lithogenesis of ground ice. Solomatina, V.I., [1986, 216p., rus] 41-1342
- Alloys as indicators of soil moisture. Bosikov, N.P., [1986, p.80-85, rus] 41-1370
- Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al, [1986, p.37-49, rus] 41-1537
- Thermophysical properties of ground containing coarse clastic inclusions. Gavril'ev, R.I., [1986, p.60-71, rus] 41-1538
- Study of tabular ground ice bodies from the Ledianaya Gora section in the Yenisey valley using the oxygen isotope method. Valkmiae, A.V., et al, [1986, p.32-38, eng] 41-1789
- Methods of predicting destructive cryogenic phenomena associated with the development of an area from the example of NW Siberia. Mel'nikov, P.I., et al, [1986, p.44-49, eng] 41-1791
- Origin of some buried ice bodies from the Yamal tundra. Krass, M.S., et al, [1986, p.66-75, rus] 41-1793
- Heat transfer from waves impacting on ice surface. Gogolev, E.S., et al, [1986, p.58-62, eng] 41-1854
- Quaternary glaciations of Central Siberia. Velichko, A.A., ed, [1986, 121p., rus] 41-1906
- Origin and stratigraphic position of thick ground-ice layers in the Ledianaya Gora outcrop. Karpov, E.G., [1986, p.73-78, rus] 41-1907
- Pleistocene glaciations in East Asia. Bessalyt, V.G., ed, [1984, 212p., rus] 41-1910
- Glacier ice in Quaternary deposits of the Malyk-Siyenskaya basin. Bessalyt, V.G., et al, [1984, p.107-116, rus] 41-1911
- Origin of Edoma deposits. Zhestkova, T.N., et al, [1986, p.108-113, rus] 41-2090
- Cryolithologic structure of the "Ice Cliff" outcrop (Central Chukotka). Kotov, A.N., et al, [1986, p.114-120, rus] 41-2091
- Frost effects in soils. Van Vliet-Lanoë, B., [1985, p.157-158, eng] 41-2112
- Chronostratigraphy of syngenetic permafrost deposits by oxygen-isotope analysis. Arkhangelov, A.A., et al, [1986, p.415-417, rus] 41-2307
- Ground ice. Shvetsov, P.F., et al, [1986, p.36-45, rus] 41-2534
- Criteria indicating the presence of taliks in permafrost. Petrova, R.G., [1986, p.49-53, rus] 41-2536
- Geocryological studies of the Pur-Nadym interfluvium, NW Siberia. Podborny, E.E., [1986, p.95-100, rus] 41-2538
- Perennally frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation. Tong, B., et al, [1986, p.66-78, rus] 41-2541
- Interaction between cryolithozone and natural gases of the underground hydrosphere. Romanovskii, N.N., [1986, p.3-17, rus] 41-2543
- Pseudomorphs of wedge ice in the Mayn River valley (Central Chukotskiy Peninsula). Kotov, A.N., [1986, p.54-62, rus] 41-2544
- Dislocations in frozen, ice-containing, Pleistocene deposits of northern western Siberia. Danilov, I.D., [1986, p.28-41, rus] 41-2816
- Variabilities in engineering-geological conditions in NW Siberia. Goral'chuk, M.I., et al, [1986, p.41-46, rus] 41-2817
- Cryogenic structure of sedimentary mantle in central Yakutian lowlands. Gravis, G.F., et al, [1986, p.60-65, rus] 41-2820
- Characteristics of granulometric obryv of Late Pleistocene deposits in the Ledovyy Obryv outcrop. Kotov, A.N., et al, [1986, p.200-206, rus] 41-2841
- Regionalization and mapping of permafrost. Trofimov, V.T., et al, [1985, p.66-72, rus] 41-2970
- Predicting the erosion of perennally frozen fines. Malinovskii, D.V., [1987, p.63-68, rus] 41-3397
- Cryolithozone and ground water. Nekrasov, I.A., [1987, p.116-118, rus] 41-3398
- Dislocations and permafrost development in the Pleistocene deposits of northern USSR. Popov, A.I., [1986, p.146-153, rus] 41-3429
- Engineering geocryology in hydraulic construction. Bianov, G.F., ed, [1986, 205p., rus] 41-3439
- Scientific bases of hydropower construction in the North in light of the Power-Engineering Program of the USSR to the year 2000. Kudoiarov, L.I., [1986, p.13-23, rus] 41-3441
- Engineering and geological conditions of construction and operation of hydraulic structures built on perennally frozen hard rocks. Kagan, A.A., et al, [1986, p.34-44, rus] 41-3444
- Geophysical research for the construction of hydraulic structures in permafrost areas. Kondrashkin, A.V., et al, [1986, p.76-83, rus] 41-3449
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481
- Possibilities of landscape indication in engineering-geological surveys of southern Central Yakutia. Gravis, G.F., et al, [1986, p.85-96, rus] 41-3489
- Mapping frozen strata in troughs of the BAM zone. An, V.V., et al, [1986, p.106-113, rus] 41-3491
- Relation between the susceptibility of permafrost landscapes and topographic dissection. Klimovskii, I.V., et al, [1986, p.113-121, rus] 41-3492
- Remote sounding and interpretation of vno-hydro-geochemical anomalies. Makarov, V.N., et al, [1986, p.133-144, rus] 41-3494
- Isotope composition of ground ice on the Yamal Peninsula. Kraisuk, L.N., et al, [1985, p.142-143, rus] 41-3537
- Paleogeological studies of relic ground ice in permafrost. Kaplanskaia, F.A., et al, [1986, p.257-266, eng] 41-3616
- Tabular body of ground ice in the Ledianaya Gora outcrop. Karpov, E.G., [1986, p.267-272, eng] 41-3617
- Coastal processes along the west coast of Yamal. Smirnov, V.M., [1986, p.317-321, eng] 41-3623
- Development of ice-wedge polygon formations. Romanovskii, N.N., [1972, p.33-41, rus] 41-3747
- Subsurface ice-lens formation by the refreezing of taliks. Gravis, G.F., et al, [1972, p.73-79, rus] 41-3748
- Oxygen isotope composition of syngenetic ice wedges (analytical data, problems of paleoclimatic reconstruction). Vasil'chuk, I.U.K., et al, [1986, p.107-119, rus] 41-3775
- All-Union conference on geographic problems in regions of new economic development. Summaries of reports. [1986, 172p., rus] 41-3974
- Regionalization of the permafrost zone for environmental protection purposes. Chizhov, A.V., et al, [1986, p.39, rus] 41-3975
- Geocryological regionalization of the Far Eastern economic region. Shats, M.M., [1986, p.71, rus] 41-4066

- Effect of dynamic action on compressibility of thawing sands. Inozemtseva, V.K., [1987, p.235-240, eng] 41-4165
- Development of ice-vein pseudomorphs in the Russian plain. Minervin, A.V., et al, [1986, p.90-100, rus] 41-4469
- Land reclamation under permafrost conditions. [1984, p.19-24, rus] 41-4484
- Permafrost thermal properties**
- Stability study of CRREL permafrost tunnel. Huang, S.L., et al, [1986, p.777-790, eng] 41-230
- Monitoring seasonal changes in seafloor temperature and salinity. Sellmann, P.V., et al, [1986, p.110-114, eng] 41-369
- State of stress and thermal stresses in concretes and reinforced concretes of hydraulic structures. Karavaev, A.V., ed, [1985, 104p., rus] 41-428
- Underground rock temperatures at the Kolyma power plant. Kuznetsov, V.S., et al, [1985, p.26-29, rus] 41-429
- Problems of ecology and environmental protection (Collections of papers of the First Republican Conference), Vol.1, [1983, 292p., rus] 41-519
- Underground storage of petroleum products in the Far North. Braiko, V.N., et al, [1983, p.107-109, rus] 41-520
- State of permafrost mined by the express method. Umansev, R.F., [1985, p.52-54, rus] 41-1018
- Measurement of ablation of exposed ground ice. Lewkowicz, A.G., [1985, p.1767-1773, eng] 41-1241
- Permafrost thermal properties in the Alaskan Arctic. Lachenbruch, A.H., et al, [1986, p.689-696, eng] 41-1254
- Mathematical models of well drilling processes in permafrost. Bugaev, V.G., [1978, p.69-73, rus] 41-1324
- Arctic thermal design. Lunardini, V.J., [1985, p.70-75, eng] 41-1327
- Forestry in permafrost regions. Pozdniakov, L.K., [1986, 192p., rus] 41-1343
- Types and characteristics of modern periglacial along the Qinghai-Xizang Highway. Wang, S., [1986, p.149-158, chi] 41-1462
- Subway construction under severe climatic conditions. Smirnov, S.A., et al, [1986, p.15-17, rus] 41-1532
- Thermophysical properties of ground containing coarse clastic inclusions. Gavril'ev, R.I., [1986, p.60-71, rus] 41-1538
- Underground ice in permafrost. Gell, W.A., [1976, 260p., eng] 41-1764
- Methods of predicting destructive cryogenic phenomena associated with the development of an area from the example of NW Siberia. Mel'nikov, P.I., et al, [1986, p.44-49, eng] 41-1791
- Heat release during agitated water movement near the ice surface. Gogolev, E.S., et al, [1985, p.14-16, rus] 41-1816
- Determining the scope of engineering-geological research in permafrost regions. Khrustalev, L.N., [1986, p.27-38, rus] 41-2083
- Geocryological characteristics of mountainous countries in Asia. Trush, N.I., [1986, p.99-108, rus] 41-2089
- Influence of anthropogenic disturbances on the temperature field of permafrost. Parmuzin, S.I.U., [1986, p.206-212, rus] 41-2102
- Field measurements of soil thermal conductivity. Goodrich, L.E., [1986, p.51-59, eng] 41-2323
- Impact of offshore permafrost on oil and gas production. Graham, C.A., [1986, p.35-47, eng] 41-2512
- Monitoring of thawing permafrost slopes. McRoberts, E.C., et al, [1986, p.133-151, eng] 41-2520
- Calculation of permafrost thawing at the bottom of a water reservoir, accounting for settlement. Gogolev, E.S., et al, [1986, p.102-104, rus] 41-2545
- Environmental protection of the North: a problem of national importance. Zabuzov, A.A., [1986, p.35-39, rus] 41-2560
- Numerical methods for predicting and controlling thermal regime of rocks in permafrost areas. Izakson, V.I.U., et al, [1986, 94p., rus] 41-2745
- Regionalization and mapping of permafrost. Trofimov, V.T., et al, [1985, p.66-72, rus] 41-2970
- Problems of engineering geocryology in hydraulic construction. Tsytovich, N.A., et al, [1986, p.23-29, rus] 41-3442
- Investigation of permafrost and climate change. [1986, var.p., eng] 41-3506
- Surface modifications for thawing of permafrost. Interim report. Esch, D.C., [1984, 15p., eng] 41-4074
- Thermal simulation of subsea saline permafrost. Nixon, J.F., [1986, p.2039-2046, eng] 41-4077
- Computation of maximum permafrost temperatures in beds beneath buildings. Konovalov, A.A., [1986, p.192-197, eng] 41-4366
- Controlling temperature regime of frozen massive rocks in northern construction. Makarov, V.I., [1983, p.13-29, rus] 41-4472
- Regularities governing the development of forms of artificially frozen zones obtained by seasonally active freezing devices. Koval'kov, V.P., [1983, p.58-71, rus] 41-4475
- Developing and standardizing methods of determining the structural properties of frozen grounds. Sadovskii, A.V., et al, [1983, p.19-21, rus] 41-4482
- Practical suggestions for calculating soil temperature regime (current awareness material). Fel'dman, G.M., [1985, 69p., rus] 41-4611
- Discussion on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al, [1987, p.120, rus] 41-4623
- Permafrost thickness**
- Interaction between cryolithozone and natural gases of the underground hydrosphere. Romanovskii, N.N., [1986, p.3-17, rus] 41-2543
- Thickness and temperature of permafrost in Kular Range. Sheshin, I.U.B., et al, [1986, p.47-50, rus] 41-2818
- Regionalization and mapping of permafrost. Trofimov, V.T., et al, [1985, p.66-72, rus] 41-2970
- Permafrost rocks of the Tsinkhai-Sizan plateau of Tibet and their formation conditions. Tong, B., et al, [1986, p.68-79, eng] 41-3017
- Permafrost transformation**
- Behavior of frost susceptible soils in industrial regions. Shpolianskaia, N.A., et al, [1985, p.103-105, rus] 41-326
- Heat transfer from waves impacting on ice surface. Gogolev, E.S., et al, [1986, p.58-62, eng] 41-1854
- Geocryological research. Ershov, E.D., ed, [1986, 224p., rus] 41-2080
- Influence of anthropogenic disturbances on the temperature field of permafrost. Parmuzin, S.I.U., [1986, p.206-212, rus] 41-2102
- Pseudomorphs of wedge ice in the Mayn River valley (Central Chukotskiy Peninsula). Kotov, A.N., [1986, p.54-62, rus] 41-2544
- Calculation of permafrost thawing at the bottom of a water reservoir, accounting for settlement. Gogolev, E.S., et al, [1986, p.102-104, rus] 41-2545
- Numerical methods for predicting and controlling thermal regime of rocks in permafrost areas. Izakson, V.I.U., et al, [1986, 94p., rus] 41-2745
- Variabilities in engineering-geological conditions in NW Siberia. Goral'chuk, M.I., et al, [1986, p.41-46, rus] 41-2817
- Thickness and temperature of permafrost in Kular Range. Sheshin, I.U.B., et al, [1986, p.47-50, rus] 41-2818
- Influence of neotectonics on the development of cryogenic formations. Sukhov, A.G., et al, [1986, p.103-115, rus] 41-2826
- Changes in engineering-geocryological conditions induced by economic development. Nevecheria, V.L., et al, [1986, p.184-191, rus] 41-2839
- Glaciers, subglacial taliks and perennially frozen rocks. Romanovskii, N.N., et al, [1986, p.206-219, rus] 41-2842
- Permafrost weathering**
- Pedogenic zonation in the well-drained soils of the Arctic region. Ugolini, F.C., [1986, p.100-120, eng] 41-793
- Formation of a primitively-cryogenic weathering crust. Il'urov, I.U.L., [1986, p.119-121, rus] 41-1002
- Heat transfer from waves impacting on ice surface. Gogolev, E.S., et al, [1986, p.58-62, eng] 41-1854
- Engineering geocryology in hydraulic construction. Bianov, G.F., ed, [1986, 205p., rus] 41-3439
- Thermal erosion in the Baykal Amur railroad zone. An, V.V., et al, [1984, p.35-39, rus] 41-4356
- Permeability**
- Setting standards for water-resistance properties of road pavement materials for Siberian conditions. Shabanov, V.M., [1986, p.106-110, rus] 41-2758
- Experimental methods of determining water permeability of frozen soils. Lavrov, S.A., [1986, p.56-62, rus] 41-3588
- Evaluation of durability for concrete in terms of watertightness by "permeability coefficient test results". Tanahashi, I., et al, [1987, p.187-206, eng] 41-3694
- Concrete durability: the interface between research and practice. O'Brien, T., et al, [1987, p.255-264, eng] 41-3695
- See also: Seepage
- Peru**
- Huascarán Mountain
- Rock avalanches in Huascarán Mountain, Peru. Körner, H., [1985, p.233-247, ger] 41-720
- Quechqaya Mountain
- Little Ice Age as recorded in the stratigraphy of the tropical Quechqaya Ice Cap. Thompson, L.G., et al, [1986, p.361-364, eng] 41-2860
- Pesticides**
- Low temperature effects on organophosphonates. Britton, K.B., [1986, 47 refs., eng] 41-3050
- Petroleum**
- See: Crude oil
- Petroleum industry**
- Overview: Arctic and offshore research. Shoemaker, H.D., [1986, p.59-62, eng] 41-366
- Valmet Co. and the technology of Arctic shelf development. [1985, p.104-105, rus] 41-1522
- Marine ice foundations for drilling rigs fixed at the bottom. Bogorodskii, V.V., et al, [1986, p.162-166, rus] 41-2171
- United States offshore developments in the Bering and Beaufort Seas. Kelly, P.L., [1986, p.124-148, eng] 41-2269
- Future of sub-arctic and arctic offshore development in Canada. Matheson, J.R., [1986, p.149-159, eng] 41-2270
- Offshore oil and gas production structures in freezing conditions. Issangulov, K.I., et al, [1986, p.160-166, eng] 41-2271
- Crude oil storage facility in the Arctic. Phillippi, H.L., et al, [1987, p.63-67, eng] 41-2403
- Tundra plant responses on the National Petroleum Reserve, Alaska. McKendrick, J.D., [1986, 225p., eng] 41-2452
- Norman Wells Pipeline Project. Pick, A.R., [1986, p.61-66, eng] 41-2515
- Circum-Arctic petroleum potential. Green, A.R., et al, [1986, p.101-130, eng] 41-2606
- Alaska: potential for giant fields. Hohler, J.J., et al, [1986, p.131-142, eng] 41-2607
- Oil and gas fields in the East Coast and Arctic basins of Canada. Menelay, R.A., [1986, p.143-176, eng] 41-2608
- Thermally insulated pipes for construction of industrial overground engineering nets. Rublev, V.A., et al, [1986, p.28-29, rus] 41-2781
- Exploration and economic evaluation of petroleum deposits in subarctic regions. D'achkova, E.A., [1987, 108p., rus] 41-2961
- Transportation in regions of new economic development. Prokof'eva, T.A., et al, [1986, 208p., rus] 41-3663
- Man, sea, technology. Narusbaev, A.A., ed, [1987, 335p., rus] 41-4145
- Petroleum products**
- Problems of ecology and environmental protection (Collections of papers of the First Republican Conference), Vol.1, [1983, 292p., rus] 41-519
- Underground storage of petroleum products in the Far North. Braiko, V.N., et al, [1983, p.107-109, rus] 41-520
- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Bratshev, A.P., ed, [1986, 119p., rus] 41-1167
- Transportation systems for new developments of the Far North. Vasiluk, V.A., [1986, p.74-79, rus] 41-1204
- Nestship vessels feel at home in ice conditions. [1985, p.120-121, rus] 41-1524
- Petroleum engineering impact on northern swamps. Polkoshnikova, O.V., et al, [1982, p.198-209, eng] 41-2344
- Basic methods and principal results of studying the role of physical, chemical and biologic factors in the cleaning of Arctic waters and ice from petroleum hydrocarbons. Il'inskii, V.V., et al, [1986, p.171-173, rus] 41-2390
- Experiments with joint action of vermucilite-based sorbents and the Barents Sea strains of petroleum oxidizing bacteria. Krasnikova, T.I., et al, [1986, p.178-180, rus] 41-2391
- Analysis of oil pollution in arctic seas, using biotechnological methods. Levchenko, A.B., et al, [1986, p.180-181, rus] 41-2392
- Natural sorbents for removing oil spills from northern sea waters. Mesiat, S.P., et al, [1986, p.181-183, rus] 41-2393
- Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] 41-2962
- Petroleum transportation**
- Architectural and structural type of the 1986-1995 models of refueling-tankers. Morelinis, F.A., et al, [1984, p.19-29, rus] 41-541
- Improving the efficiency of petroleum transportation by river. Zhivotkevich, N.I., ed, [1986, 96p., rus] 41-2914
- Transportation of petroleum products during the extended and winter navigation seasons. Levantov, B.I., [1986, p.61-66, rus] 41-2915
- Exploration and economic evaluation of petroleum deposits in subarctic regions. D'achkova, E.A., [1987, 108p., rus] 41-2961
- Phase transformations**
- Crystalline substances and products (methods of estimating and improving qualities). Khamskii, E.V., [1986, 222p., rus] 41-482
- Free energies of crystal-vapor systems. Broughton, J.Q., et al, [1986, p.5741-5748, eng] 41-497
- Thermodynamic properties of metastable systems and the kinetics of phase transformations. Nikitin, E.D., ed, [1985, 87p., rus] 41-552
- Supercooling and crystallization of water, heavy water and organic substances. Bogdanov, N.M., et al, [1985, p.30-43, rus] 41-553
- Heat conduction phase change problems. Albert, M.R., et al, [1986, p.591-607, eng] 41-607
- Transient two-dimensional phase change. Albert, M.R., et al, [1985, p.229-243, eng] 41-657
- Two-dimensional heat conduction phase change. Albert, M.R., et al, [1983, p.85-110, eng] 41-659
- Outward melting in a cylindrical annulus. Ho, C.J., et al, [1986, p.240-245, eng] 41-850
- Moisture in hygroscopic materials. Efimov, S.S., [1986, 160p., rus] 41-1044

**Phase transformations (cont.)**

- Periodic phase transformations in liquids. Akulichev, V.A., et al, [1986, 280p., rus] **41-1271**
- Melting process in which solid-liquid interface remains free during melting. Shmarev, S.I., [1986, p.95-99, rus] **41-1627**
- Vacuum freezing with multiple phase transformations. Cheng, C.-Y., et al, [1983, 14 col., eng] **41-1674**
- Partial phase diagram for the system NH<sub>3</sub>-H<sub>2</sub>O: the water-rich region. Johnson, M.L., et al, [1985, p.39-47, eng] **41-1695**
- Hugoniot of water ice. Gaffney, E.S., [1985, p.119-148, eng] **41-1701**
- Amorphous and porous ices in cometary nuclei. Smoluchowski, R., [1985, p.397-406, eng] **41-1714**
- Amorphous-crystalline phase transition and the light curve of comet P/Halley. Rickman, H., et al, [1985, p.419-428, eng] **41-1716**
- Temperature field and annual heat cycles in soils. Makeev, O.V., et al, [1986, p.27-31, rus] **41-1744**
- Transformation prior to melting in ammonia, organic compounds and ice. Pruzan, P., et al, [1986, p.949-961, eng] **41-1864**
- Freeze-thaw of pore moisture in sandy rocks. Medvedskii, R.I., [1986, p.543-549, eng] **41-1894**
- Moving boundary problem. Benard, C., et al, [1986, p.1669-1681, eng] **41-2065**
- Bound water and ice transformations in rock and ground systems. Ershov, E.D., [1986, p.8-18, rus] **41-2081**
- Heat transfer characteristics of a latent heat storage unit. Sasaguchi, K., et al, [1986, p.2978-2992, eng] **41-2110**
- Crystallization of motionless supercooled water. Smorygin, G.I., [1986, p.16-23, rus] **41-2148**
- Self-similar solution of a problem of freezing of finely dispersed soils with allowance for moisture migration in thawed and frozen zones. Anitskii, P.A., [1986, p.264-270, eng] **41-2208**
- Self-simulating multivariate Stefan problem. Shmarev, S.I., [1986, p.126-146, rus] **41-2351**
- Two-dimensional freezing fronts in algid soil. Yen, C.C., et al, [1987, p.109-112, eng] **41-2410**
- Energy transfer in soil with nonequilibrium phase transformation. Danielian, I.U.S., et al, [1986, p.156-161, rus] **41-2558**
- Regionalization and mapping of permafrost. Trofimov, V.T., et al, [1985, p.66-72, rus] **41-2970**
- Freezing of water and melting of ice in disperse rocks. Ershov, E.D., [1986, p.55-67, eng] **41-3016**
- Heat transfer, 1986; proceedings. [1986, 6 vols. + 1 vol. of abstracts, eng] **41-3288**
- Non-isothermal and transient flow of molten polymer in an open rectangular cavity. Flaman, A.A.M., et al, [1986, p.1751-1754, eng] **41-3294**
- Outward phase change in a cylindrical annulus with circumferential fins. Padmanabhan, P.V., et al, [1986, p.1773-1779, eng] **41-3295**
- Effects of density change and subcooling on the melting of a solid in a rectangular enclosure. Kassinos, A., et al, [1986, p.1787-1792, eng] **41-3296**
- Direct contact melting heat transfer on a heated surface. Saito, A., et al, [1986, p.1805-1810, eng] **41-3299**
- Vitrified liquid water to cubic ice phase transition. Hallbrucker, A., et al, [1987, p.503-505, eng] **41-3312**
- Liquid-solid phase change heat transfer. Maslaniac, K.C., et al, [1985, p.194-205, eng] **41-3339**
- Heat transfer with phase change in ground-water flow. Kawatani, T., et al, [1985, p.206-217, eng] **41-3340**
- Phase composition of moisture in freezing disperse rocks. Danielian, I.U.S., et al, [1986, p.52-59, rus] **41-3395**
- Cryolithozone and ground water. Nekrasov, I.A., [1987, p.116-118, rus] **41-3398**
- Freezing. Haymet, A.D.J., [1987, p.1076-1080, eng] **41-3409**
- Pressure-induced phase transformations in ice. Tse, J.S., et al, [1987, p.1672-1675, eng] **41-3645**
- Raman scattering spectra at the water-ice phase transition. Glushkov, S.M., et al, [1986, p.83-839, rus] **41-3686**
- Calculating pore penetration into rocks of a cylindrical cavity. Dugartysrenov, A.V., et al, [1986, p.21-24, rus] **41-3770**
- Rheological properties of temperate firn. Ambach, W., et al, [1985, p.71-77, eng] **41-4130**
- Isothermal phase change model for freezing and thawing soils 1: development. Hromadka, T.V., II, [1986, p.113-117, eng] **41-4134**
- Isothermal phase change model for freezing and thawing soils 2: model. Hromadka, T.V., II, et al, [1986, p.118-123, eng] **41-4135**
- Cooling of a salt solution. Entov, V.M., et al, [1987, p.1344-1347, eng] **41-4164**
- Determining the thermal conductivity coefficient for thawed and frozen grounds. Danielian, I.U.S., et al, [1983, p.20-24, rus] **41-4483**
- Research in building engineering. Structural thermodynamics. Service life of structures. Polonskii, V.P., ed, [1986, 179p., rus] **41-4500**
- Stability of a plane crystallization front moving at constant velocity. Badratinova, L.G., [1983, p.388-394, eng] **41-4613**

See also: Solid phases

**Phenology**

- Remote sensing techniques in studying seasonal dynamics of landscapes. Elagin, I.N., [1986, p.159-169, rus] **41-3972**
- Photogrammetric surveys**
- Remote sensing techniques in studying seasonal dynamics of landscapes. Elagin, I.N., [1986, p.159-169, rus] **41-3972**
- Photogrammetric observations of the lateral melt of sea ice floes. Hall, R.T., et al, [1987, p.7045-7048, eng] **41-4259**
- Photogrammetry**
- Map of the Mount Gongga Glacier. Chen, J., [1986, p.34-36, eng] **41-734**
- Mapping of the margin of the inland ice, W. Greenland. Thomsen, H.H., [1986, p.164-167, eng] **41-762**
- Methods of geomorphological field experiments in the USSR. Dedkov, A.P., ed, [1986, 160p., rus] **41-1197**
- Methods of studying rock streams by repeated phototheodolite surveys. Shevchenko, B.F., [1986, p.130-134, rus] **41-1201**
- Glacier mass balances in the Cajon del Rubio, Andes Centrales Argentinas. Leiva, J.C., et al, [1986, p.83-90, eng] **41-1307**
- Behavior of Columbia Glacier, Alaska. Meier, M.F., et al, [1985, 41p. + 8 maps, eng] **41-3403**
- Photographic reconnaissance**
- Recent glacier oscillations in China. Zhang, X., [1986, p.99-105, 217-223, eng] **41-1061**
- Photography**
- Problems arising from collection and interpretation of data for a new glacier inventory. Secchieri, F., [1985, p.156-165, ita] **41-3184**
- Disk camera system for automatic recording of visual data: snow depth in field plots. Alberg, A.H., et al, [1987, p.927-929, eng] **41-4230**
- See also: Infrared photography; Radar photography; Spaceborne photography
- Photointerpretation**
- Glacier mapping in Glacier National Park, B.C. Champoux, A.C., et al, [1986, p.27-30, eng] **41-732**
- Errors in geological interpretation of space images. Kuzin, I.L., [1984, p.436-442, eng] **41-820**
- Geological interpretation of space images of covered areas. Astakhov, V.I., [1984, p.443-451, eng] **41-821**
- Possibility of distinguishing landscape types and evaluating their hydrologic properties from space photographs. Markus, I.A.A., [1986, p.153-159, rus] **41-1373**
- Interpolation of satellite data on seasonal snow line elevations within the mountain region limits. Tsarev, B.K., [1986, p.59-65, rus] **41-1686**
- Study of ice covers by radiophysical means from aerospace platforms. Efimov, V.B., et al, [1985, p.394-399, eng] **41-1892**
- Evaluation of SPOT HRV simulation data for Corps of Engineers applications. McKim, H.L., et al, [1985, p.61-71, eng] **41-1917**
- Permafrost distribution and temperature from aerial surveys and spaceborne photography. Gavrilov, A.V., [1986, p.58-76, rus] **41-2086**
- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, [1986, 160p., rus] **41-2714**
- Scientific problems and basic results of the "Kosmos-1500" experiment. Afanas'ev, I.U.A., et al, [1986, p.4-20, rus] **41-2715**
- Cluster analysis of airborne-radar images of ice covers. Asmus, V.V., et al, [1986, p.64-72, rus] **41-2718**
- Engineering-geological evaluation of railroad construction areas. Marakhtanov, V.P., [1986, p.12-13, rus] **41-2791**
- Using satellite survey data for studying mass transfer in glacial systems. Nosenko, G.A., [1986, p.26-31, rus] **41-3211**
- Satellite methods of studying naleds and ground waters of eastern Pamir. Topchiev, A.G., [1986, p.48-58, rus] **41-3391**
- Remote sounding and interpretation of cryo-hydro-geochemical anomalies. Makarov, V.N., et al, [1986, p.133-144, rus] **41-3494**
- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed, [1986, 192p., rus] **41-3513**
- Spaceborne photography methods of monitoring geosystems in the new economic development areas of Siberia. Plastinin, L.A., [1986, p.9-14, rus] **41-3514**
- Using satellites in mapping West Siberian forests. Gorozhankina, S.M., et al, [1986, p.34-43, rus] **41-3515**
- Use of satellite information in studying distribution of discontinuous permafrost. Dorofeev, I.V., et al, [1986, p.55-59, rus] **41-3518**
- Ground water naleds, central BAM. Deifin, B.N., et al, [1986, p.86-94, rus] **41-3520**
- Satellite methods of studying naleds. Abakumenko, A.E., [1986, p.94-99, rus] **41-3521**
- Classification of sea ice according to structural characteristics. Aleksanina, M.G., [1985, p.52-58, rus] **41-3544**

**Sea ice concentration assessed from aerospace imagery**

- Aleksandrov, V.I.U., et al, [1987, p.181-189, eng] **41-3626**
- Remote sensing techniques used in solving geobotanical problems. Sharapov, V.N., ed, [1986, 191p., rus] **41-3970**
- Remote sensing techniques of studying taiga after forest fires. Furiaev, V.V., [1986, p.147-159, rus] **41-3971**
- Effect of divergence on ice redistribution in the Arctic Ocean, revealed by space imagery analysis. Nazirov, M., [1987, p.30-36, rus] **41-4618**
- Estimating the effect of atmospheric precipitation on sea-ice radar images. Aleksandrov, V.I.U., [1987, p.37-43, rus] **41-4619**
- See also: Geobotanical interpretation
- Photometers**
- Scattering photometer for measuring single ice crystals and liquid droplets. Pluchino, A., [1987, p.614-620, eng] **41-3153**
- Photometry**
- Automated highway design. Fedotov, G.A., [1986, 317p., rus] **41-2861**
- Photosynthesis**
- Seasonal variation of chlorophyll-a in fast ice near Davis Station. Lu, P., [1986, p.11-19, chi] **41-397**
- Some ecological observations on antarctic ice algae. Zhang, K., et al, [1986, p.49-59, chi] **41-399**
- Photosynthesis of steppe plants in eastern Hangay. Siemnev, N.N., [1986, p.460-473, rus] **41-990**
- Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al, [1984, p.159-165, eng] **41-1280**
- Carbon dioxide gas exchange components of tundra plants at various temperatures. Lediakina, N.A., et al, [1986, p.1067-1073, rus] **41-1455**
- Photosynthetic adaptation of sea ice microalgae in Hudson Bay. Legendre, L., et al, [1986, p.321-326, eng] **41-1554**
- Microalgal carbon assimilation in sea ice of East Antarctica. McConville, M.J., et al, [1985, p.135-141, eng] **41-1629**
- Photosynthesis and carbon metabolism of phytoplankton from McMurdo Sound, Pt.1. Rivkin, R.B., et al, [1987, p.249-259, eng] **41-2504**
- Photoadaptive strategies in a natural population of *Phaeocystis pouchetii* in McMurdo Sound. Palmisano, A.C., et al, [1985, p.133-134, eng] **41-2957**
- Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses. Rivkin, R.B., et al, [1985, p.146-147, eng] **41-2960**
- Sea ice microbial communities. 6. Growth and primary production in bottom ice under graded snow cover. McGrath Grossi, S., et al, [1987, p.153-164, eng] **41-3131**
- Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microalgal communities. Palmisano, A.C., et al, [1987, p.165-173, eng] **41-3132**
- Bacterial production in annual sea ice in McMurdo Sound. Kottmeier, S.T., et al, [1987, p.175-186, eng] **41-3133**
- Spectral downwelling irradiance in an antarctic lake. Palmisano, A.C., et al, [1987, p.145-151, eng] **41-3426**
- Ice-algae photosynthesis under fast ice at Showa Station. Satoh, H., et al, [1986, p.34-42, eng] **41-3631**
- Phytoplankton in the marginal ice zone of the Greenland Sea during summer, 1984. Spies, A., [1987, p.195-205, eng] **41-3684**
- Intracellular photosynthate allocation and the control of Arctic marine ice algal production. Smith, R.E.H., et al, [1987, p.124-132, eng] **41-3998**
- Physical properties**
- Thermophysical properties data on graphite/polyimide composite materials. Campbell, M.D., et al, [1982, p.54-72, eng] **41-1988**
- Physical properties of asphalt cements used in Quebec from 1979 to 1986. Boudreaux, J., [1986, p.302-319, eng] **41-2206**
- Radiometric properties of snow, ice and water. Steyn-Ross, D.A., et al, [1986, p.971-980, eng] **41-3992**
- See also: Atmospheric physics; Frozen ground physics; Ice physics; Permafrost physics; Snow physics; Soil physics
- Physiology**
- See: Plant physiology
- Piers**
- Reinforced concrete plating for bridge reconstructions. Kvasha, V.G., et al, [1985, p.5-7, rus] **41-507**
- Ice forces on bridge piers. Haynes, F.D., [1986, p.83-101, eng] **41-645**
- Bridge construction under severe climatic conditions. Veinblat, B.M., et al, [1986, p.9-11, rus] **41-1887**
- Bridge piers without grillage under complicated natural conditions. Kudriashov, V.I., et al, [1987, p.16-17, rus] **41-2793**
- Studies and calculations in structural design and building technology of hydraulic transport structures. Shkol'nikov, I.E., ed, [1986, 96p., rus] **41-2908**
- Designing filled-up piers with ice-bearing cores. Sokolov, A.V., [1986, p.34-42, rus] **41-2909**
- Construction of deep foundations. Giotov, N.M., et al, [1985, 248p., rus] **41-3125**



**See also:** Docks; Wharves**Pile driving**

Building pile foundations in water-saturated silty clay grounds. Vorontsov, G.I., et al, [1986, p.8-10, rus] 41-878

Nondestructive testing of frost-resistant concrete piles. Ponomarev, O.I., et al, [1986, p.62-63, rus] 41-883

Pile driving assembly for frozen ground. Falvusovich, L.L., et al, [1986, p.10-11, rus] 41-1525

Resistance of frozen ground to steady cone or pile penetration. Huneault, P., et al, [1987, p.125-132, eng] 41-2413

Engineering properties of permafrost. Ladanyi, B., [1986, p.24-33, eng] 41-2511

Equipment for mechanized drilling of ice covers. Tavrizon, V.M., [1987, p.13-15, rus] 41-3066

Forecasting ground temperature during adfreezing of piles. Pylaev, E.L., et al, [1987, p.73-75, rus] 41-3269

Footproof sinking of piles into thawed and perennially frozen grounds. Novozhilov, G.F., [1987, 111p, rus] 41-4167

Using fire-jet drills in permafrost. Sherstuk, B.F., et al, [1986, p.8-10, rus] 41-4615

Steam vibro-leading machines for drilling in permafrost. Gokhman, M.R., et al, [1986, p.20-23, rus] 41-4616

**Pile load tests**

Behavior of laterally loaded piles in permafrost. Neukirchner, R.J., et al, [1987, p.1-14, eng] 41-2115

Analysis of laterally loaded piles in permafrost. Neukirchner, R.J., [1987, p.15-29, eng] 41-2116

Footproof sinking of piles into thawed and perennially frozen grounds. Novozhilov, G.F., [1987, 111p, rus] 41-4167

**Pile structures**

Calculating pile foundations for hydraulic structures. Levachev, S.N., et al, [1986, 133p, rus] 41-1747

Level ice indentation on a pile array. Mizikos, J.P., et al, [1987, p.273-279, eng] 41-2432

Studying heat and mass transfer in frozen ground around thermopiles. Nesterov, I.I., et al, [1986, p.1127-1130, rus] 41-2537

Studying the effect of ground conditions on strength and stability of non-pilework bridge supports exposed to moving ice. Zhordochko, I.O., et al, [1987, p.101-104, rus] 41-3792

Footproof sinking of piles into thawed and perennially frozen grounds. Novozhilov, G.F., [1987, 111p, rus] 41-4167

Using thermopiles in network construction. Smirnov, V.N., [1983, p.108-118, rus] 41-4481

**Piles**

Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985). Sal'nikov, P.I., ed, [1985, 119p, rus] 41-276

Formula for calculating frost-heave effect on pyramidal piles. Sazhin, V.S., et al, [1985, p.13-15, rus] 41-279

Foundationless low-rise buildings for structurally unstable ground. Abramov, V.E., [1985, p.18-19, rus] 41-282

Pile foundations for buildings on deep freezing ground. Moisechik, E.K., [1985, p.22-23, rus] 41-284

Cast-in-situ drilled piles in frost heaving ground. Sal'nikov, P.I., et al, [1985, p.23-25, rus] 41-285

Estimating the deformation of low-loaded structures in the BAM zone. Sobin, G.P., [1985, p.28-30, rus] 41-288

Pile-foundation supports of power lines in the southern Far East. Tiurin, I.M., [1985, p.63-64, rus] 41-307

Construction of foundations of low-rise buildings and structures on sagging ground. Koroteev, D.V., [1986, 155p, (pertinent p. 80-135), rus] 41-784

Building pile foundations in water-saturated silty clay grounds. Vorontsov, G.I., et al, [1986, p.8-10, rus] 41-878

Nondestructive testing of frost-resistant concrete piles. Ponomarev, O.I., et al, [1986, p.62-63, rus] 41-883

Substations 110/6-10 kv built in the Urengoy gas field area. Gaft, S.I.A., et al, [1986, p.6-7, rus] 41-910

Determination of ice forces with centrifuge models. Clough, H.F., et al, [1986, p.49-60, eng] 41-1035

On the frequency analysis of ice peaks. Javanainen, M., [1986, p.222-227, eng] 41-1098

Studying hydraulic drive of drilling equipment at low temperatures. Makushkin, D.O., et al, [1978, p.63-68, rus] 41-1323

Hydrojet drilling technology for permafrost. Petrosian, L.R., et al, [1986, p.39-41, eng] 41-1849

Testing bearing strength of piles in permafrost by static penetration. Trofimenkov, I.U.G., et al, [1986, p.58-63, eng] 41-1850

Safety measures for electric-power objects of the South Yakutia Task Economic Complex. Sedalishchev, V.A., et al, [1985, p.91-99, rus] 41-1926

Marine ice foundations for drilling rigs fixed at the bottom. Bogorodskii, V.V., et al, [1986, p.162-166, rus] 41-2171

Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p, rus] 41-2911

Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p, rus] 41-2968

Construction of deep foundations. Glotov, N.M., et al, [1985, 248p, rus] 41-3125

Torsional resistance of a single pile in a layered soil. Hache, R.A.G., et al, [1986, p.1004-1019, eng] 41-3172

Forecasting ground temperature during adfreezing of piles. Pylaev, E.L., et al, [1987, p.73-75, rus] 41-3269

Long river crossings of overhead power lines. Elenbogen, G.N., et al, [1987, p.2-9, rus] 41-3611

Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, [1986, 328p, rus] 41-3664

Footproof sinking of piles into thawed and perennially frozen grounds. Novozhilov, G.F., [1987, 111p, rus] 41-4167

Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed, [1986, 81p, rus] 41-4546

Ice-pillar roof supports in northern mines. Stoliarov, A.M., et al, [1986, p.38-47, rus] 41-4554

**See also:** Concrete piles; Thermopiles

**Pingos**

Pingos—a not so open and closed case. Waddington, C.K., [1985, p.30-52, eng] 41-578

Growth of Ibyuk Pingo, western Arctic coast, Canada. Mackay, J.R., [1986, p.68-80, eng] 41-791

Pingo ice of the western Arctic coast, Canada. Mackay, J.R., [1985, p.1452-1464, eng] 41-1238

Pingos of the Prudhoe Bay region, Alaska. Walker, D.A., et al, [1985, p.321-336, eng] 41-1251

Pingos and palsas in northernmost Sweden. Lagerbäck, R., et al, [1986, p.149-154, eng] 41-1873

Permafrost mounds in the Abisko area, northern Sweden. Akerman, H.J., et al, [1986, p.155-165, eng] 41-1874

Morphology, genesis and temporal context of the Aishihik pingo (SW Yukon). Geurts, M.A., et al, [1985, p.291-298, fre] 41-2761

Waters in active layers and nald formation. Poznanin, V.L., [1986, p.142-147, rus] 41-2832

Pingo scars in Devès, Haute-Loire, France. Bout, P., [1986, p.17-26, fre] 41-3577

**Pipe flow**

Measurements of the snow fraction in a snow/water mixture flow in a pipe. Shirakashi, M., et al, [1986, p.2156-2160, eng] 41-3407

Pneumatic conveying of ice into deep mines. Correia, R.M., et al, [1987, p.155-167, eng] 41-4329

**Pipe laying**

Method of laying pipelines at low temperatures. Karpov, S.V., [1987, p.12-13, rus] 41-3810

Arctic dredge spread. Machemehl, J.L., [1987, p.125-130, eng] 41-4633

**Pipeline freezing**

Icing on walls of buried pipeline carrying a freezing liquid. Ovsiannikov, V.M., [1986, p.212-219, eng] 41-1893

Pipeline transport in mining industry. Pokrovskaya, V.N., [1985, 193p, rus] 41-2712

Dynamics of the freezing over of underground pipes. Krasovitskii, B.A., [1987, p.1331-1337, eng] 41-4162

**Pipeline heating**

Pipeline transport in mining industry. Pokrovskaya, V.N., [1985, 193p, rus] 41-2712

**Pipelines**

Explosion welding of a large diameter gas transmission pipeline. Justice, J.T., et al, [1986, p.1-13, eng] 41-77

Research priorities in Canadian waters. Goddins, D.O., [1986, p.295-332, eng] 41-251

Frost bulb with or without groundwater flow on a buried chilled Alaskan pipe. Perera, W.G., [1984, p.1850-1855, eng] 41-457

Research on transportation facilities in cold regions. Andersland, O.B., ed, [1986, 105p, eng] 41-639

Pipeline frost heave predictions using a 2-D thermal model. Nixon, J.F., [1986, p.67-82, eng] 41-644

Engineering surveys along the Trans-Alaska Pipeline. Godfrey, R.N., et al, [1986, 85p, eng] 41-799

Structural hollow sections and PE-coated steel pipes in the Arctic. Soininen, R., [1986, p.970-987, eng] 41-1141

Transportation systems for new developments of the Far North. Vasiluk, V.A., [1986, p.74-79, rus] 41-1204

Basic problems of power supply in the North. Ryl'skii, V.A., et al, [1986, p.86-93, rus] 41-1205

Workshop on Subsea Permafrost and Pipelines in Permafrost, 1985. [1986, 168p, eng] 41-2507

Alyeska Pipeline: monitoring, operations and maintenance. Johnson, E.R., [1986, p.126-132, eng] 41-2519

Pipeline transport in mining industry. Pokrovskaya, V.N., [1985, 193p, rus] 41-2712

Thermally insulated pipes for construction of industrial overground engineering nets. Rublev, V.A., et al, [1986, p.28-29, rus] 41-2781

Comparative efficiency of coal transportation by railroad and by hydraulic pipelines. Falvetta, V.I.A., et al, [1986, p.22-24, rus] 41-2783

Efficiency of using foam plastics as hydro-thermoinsulating materials for electrical heating plants. Valgin, V.D., et al, [1986, p.17-18, rus] 41-2795

Ductless method of laying pipes with phenol-poroplast insulation. Nesterov, V.I., et al, [1986, p.18-20, rus] 41-2796

Reliability of welded steel joints of main pipelines. Chaburkin, V.F., [1985, p.54-61, rus] 41-2850

Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p, rus] 41-2962

Engineering applications and risk assessment: summary and discussion. Allan, D., et al, [1986, p.31-37, eng] 41-3089

Pipelines and permafrost—science in a cold climate. Williams, P.J., [1986, 129p, eng] 41-3188

Arctic National Wildlife Refuge, Alaska. [1987, 208p, + maps, eng] 41-3362

Thermodynamics and mechanics of freezing soil around a pipeline. Patterson, D.E., et al, [1986, 111p, eng] 41-3364

Winter maintenance and testing of main pipelines. Zinov'ev, V.N., et al, [1987, p.29-31, rus] 41-3736

Man, sea, technology. Narusbaev, A.A., ed, [1987, 335p, rus] 41-4145

Ships used in the exploitation of offshore deposits. Gornshel'nik, K., et al, [1987, p.221-231, rus] 41-4147

Statistical modeling of pipeline interaction with the environment. Khrenov, N.N., [1987, p.40-43, rus] 41-4154

Hydraulic conveying of snow. Tokunaga, Y., et al, [1987, p.59-66, jpn] 41-4320

Offshore and Arctic pipelines—1987. [1987, 199p, eng] 41-4628

High impact welding in Arctic pipeline construction. Loyer, A., [1987, p.99-108, eng] 41-4630

Pipeline frost heave predictions. Nixon, J.F., [1987, p.109-114, eng] 41-4631

Limit state probabilistic design of offshore Arctic pipelines. Row, D.G., et al, [1987, p.115-123, eng] 41-4632

Duplex stainless steel linepipe for Arctic use. Taira, T., et al, [1987, p.159-165, eng] 41-4635

**See also:** Gas pipelines; Hot oil lines; Underground pipelines; Water pipelines

**Pipes (tubes)**

International Heat Transfer Conference, 6th, Toronto. [1978, Vols. 1, 2 and 3, eng] 41-463

Blockage of flow resulting from freezing of liquid. Creighton, D.L., et al, [1978, p.37-42, eng] 41-468

Numerical simulation of melting of ice around a horizontal cylinder. Ho, C.J., et al, [1986, p.1359-1369, eng] 41-564

Melting of a solid cylinder pressed against a heated wall. Martin, H., et al, [1986, p.1407-1415, eng] 41-566

Transient two-dimensional phase change. Albert, M.R., et al, [1985, p.229-243, eng] 41-657

Optical cable properties under ice. Tanaka, M., et al, [1981, p.22(1)-22(4), eng] 41-661

Performance of a closed tube thermosyphon. Lock, G.S.H., et al, [1987, p.69-77, eng] 41-2404

Heat transfer of a thermosyphon. Zarling, J.P., et al, [1987, p.79-84, eng] 41-2405

Snow/water mixture flow in a pipe. Umehura, T., et al, [1986, p.207-214, jpn] 41-2604

Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed, [1983, 123p, rus] 41-4470

**See also:** Heat pipes; Water pipes

**Pit and mound topography**

Weathering pit development, Otago Mts., New Zealand. Fahey, B.D., [1986, p.337-347, eng] 41-1181

**Pits (excavations)**

Water and bottom muds in reserve pits, Alaska. Pollen, M.R., [1986, 164p, + append., eng] 41-2451

Drilling complex BTSE-600 for rocks and frozen ground. Bryzhko, S.A., et al, [1986, p.41, rus] 41-2790

Design and construction of the sole part of the Kureyskaya channel dam. Makarov, V.A., et al, [1986, p.27-31, rus] 41-2866

Failure of frozen soils by high-pressure hydraulic jets in trench and pit construction. Petrosian, L.R., et al, [1986, p.194-197, eng] 41-2946

Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p, rus] 41-2968

Construction properties of gley clayey ground. Popov, A.F., [1986, p.16-22, rus] 41-3393

**Placer mining**

Frozen ice-shingle-gravel mixtures for roof supports in northern mines. Markov, V.S., et al, [1986, p.201-208, rus] 41-2179

Alluvial diamond discoveries in placer gravels, Crooked Creek, Alaska. Forbes, R.B., et al, [1987, 26p, eng] 41-2241

Using the UBM-20A assembly for drilling large-diameter wells in permafrost. Minakov, V.M., et al, [1986, p.24-27, rus] 41-2533

Blasting work in ground and rocks. Kucheriavii, F.I., ed, [1986, 128p, rus] 41-2903

Using the blow-out method in open mining of placer deposits. Poplavskii, V.A., [1986, p.48-54, rus] 41-2904

**Placer mining (cont.)**

- Using lesser diameter charges in blasting frozen placer deposits. Shchegolev, S.V., [1986, p.81-85, rus] **41-2907**
- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed. [1986, 81p., rus] **41-4546**
- Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams. Mironov, V.P., et al. [1986, p.3-7, rus] **41-4547**
- Selection of parameters for shaft pillars of placer mines. Panishev, V.V., [1986, p.7-10, rus] **41-4548**
- New sampling technique for northern placer mines. Riabets, N.I., et al. [1986, p.10-15, rus] **41-4549**
- Suction dredges used in placer mining of the North. Vinchenko, V.V., [1986, p.15-19, rus] **41-4550**
- Increasing safety of underground mining by using power driven equipment. Kivileva, N.M., [1986, p.25-30, rus] **41-4551**
- Roof supports used in mines of permafrost areas. Efremov, A.P., et al. [1986, p.30-33, rus] **41-4552**
- Ice-pillar roof supports in northern mines. Stoliarov, A.M., et al. [1986, p.38-47, rus] **41-4554**
- Plains**
- Relations between swamp development and relief forms of northern plains. Kolomytsev, V.A., [1985, p.125-149, rus] **41-194**
- Quantitative estimation of frost heave of different grounds. Shesternev, D.M., [1985, p.78-80, rus] **41-313**
- Human factor impacts on Siberian floodplains during land reclamation. Malik, L.K., [1986, p.64-71, rus] **41-1367**
- Variability of hydrological characteristics in western Siberia. Nikitin, S.P., et al. [1986, 204p., rus] **41-1969**
- Cryogenic structure of sedimentary mantle in central Yakutian lowlands. Gravis, G.F., et al. [1986, p.60-65, rus] **41-2820**
- Engineering geology in construction. Ziangirov, R.S., et al. [1986, 175p., rus] **41-2889**
- See also: Floodplains
- Planetary environments**
- The living Earth. Agriculture and natural resources. Ushakov, S.A., ed. [1986, 167p., rus] **41-1163**
- Ices in the solar system; proceedings of the workshop, 1984. [1985, 954p., eng] **41-1693**
- Evolution of ices from interstellar space to the solar system. Greenberg, J.M., et al. [1985, p.185-204, eng] **41-1705**
- Formation history and environment of cometary nuclei. Yamamoto, T., [1985, p.205-219, eng] **41-1706**
- Solar energetic ions and interplanetary grains. Strazzulla, G., et al. [1985, p.273-285, eng] **41-1707**
- Sputtering of water ice at 30-140 K by 0.5-6.0 keV H(+) and Ne(+) ions. Bar-Nun, A., et al. [1985, p.287-299, eng] **41-1708**
- Ion bombardment of the surface of ice objects. Johnson, R.E., et al. [1985, p.301-315, eng] **41-1709**
- Ion irradiations of water, sulfur dioxide and methane ices. Lanzerotti, L.J., et al. [1985, p.317-335, eng] **41-1710**
- Present status of the icy conglomerate model. Whipple, F.L., [1985, p.343-366, eng] **41-1711**
- Snow sublimation temperature of the cometary nucleus. Delsemme, A.H., [1985, p.367-387, eng] **41-1712**
- S2: a clue to the origin of cometary ice? A'Hearn, M.F., et al. [1985, p.463-471, eng] **41-1719**
- Icy satellites, rings and Pluto. Klinger, J., [1985, p.621-629, eng] **41-1727**
- Accretion of icy satellites of Jupiter and Saturn. Ahrens, T.J., et al. [1985, p.631-654, eng] **41-1728**
- Composition and structure of planetary rings. Burns, J.A., [1985, p.655-679, eng] **41-1729**
- Ices in planetary rings. Smoluchowski, R., [1985, p.681-689, eng] **41-1730**
- Small icy satellites of Saturn. Cruikshank, D.P., [1985, p.691-697, eng] **41-1731**
- Shapes and strengths of small icy satellites. Farinella, P., et al. [1985, p.699-710, eng] **41-1732**
- Icy satellites of Uranus. Brown, R.H., [1985, p.711-729, eng] **41-1733**
- Atmospheres of icy bodies. Owen, T., [1985, p.731-740, eng] **41-1734**
- Interaction of liquid hydrocarbons and water-ice or ammonia hydrates. Lunine, J.I., et al. [1985, p.741-757, eng] **41-1735**
- Importance of the tectonic motions on Ganymede. Forni, O.P., et al. [1985, p.759-766, eng] **41-1736**
- Some remarks on the geology of Ganymede. Bianchi, R., et al. [1985, p.767-779, eng] **41-1737**
- Tectonics of Valhalla basin on Callisto. Thomas, P.G., et al. [1985, p.781-790, eng] **41-1738**
- Sulfur dioxide ice on Io. Cruikshank, D.P., et al. [1985, p.805-815, eng] **41-1739**
- Methane ice on Triton and Pluto. Cruikshank, D.P., et al. [1985, p.817-827, eng] **41-1740**
- Geology of icy satellites. McKinnon, W.B., [1985, p.829-856, eng] **41-1741**
- Summary of the highlights of the conference. Smoluchowski, R., [1985, p.859-864, eng] **41-1742**
- Planet Venus. Kondrat'ev, K.I.A., et al. [1987, 278p., rus] **41-3689**

- Icy Galilean satellite reflectance spectra: less ice on Ganymede and Callisto? Spencer, J.R., [1987, p.99-110, eng] **41-3964**
- Signs of "semiarid" pediplanation on Mars. Polosukhin, V.P., [1987, p.79-85, rus] **41-4497**
- See also: Mars (planet)
- Plankton**
- Identification of phytoplankton pigments in waters near Davis Station. Li, B., et al. [1986, p.110-115, chi] **41-403**
- Nanoplankton in the waters near Davis Station. Mao, X., et al. [1986, p.130-135, chi] **41-404**
- Reports of US/USSR Weddell Polynya Expedition, Vol.8. Ackley, S.F., ed. [1986, 158p., eng] **41-460**
- Benthic microalgal standing stock distribution patterns at McMurdo Sound. Dayton, P.K., et al. [1986, p.207-213, eng] **41-1015**
- Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al. [1984, p.159-165, eng] **41-1280**
- Benthos in the experimental bays of the Ob' River below Novosibirsk. Blagovidova, L.A., et al. [1985, p.66-72, rus] **41-1832**
- All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. [1986, 268p., rus] **41-2384**
- Bacterial plankton in the ecosystems of pelagic zones of the Barents and White seas. Teplinskaya, N.G., [1986, p.18-20, rus] **41-2388**
- Modification of bottle bathometer for studying bacterioplankton at shallow depths. Bafta, V.A., [1986, p.53-55, rus] **41-2389**
- Diatoms beneath the Greenland ice and climatic changes. Harwood, D.M., [1986, p.304-308, eng] **41-2688**
- Microheterotrophs in the ice-edge zone: an AMERIEZ study. Garrison, D.L., et al. [1985, p.136-137, eng] **41-2958**
- Phytoplankton from the southwestern Atlantic Ocean. Fryxell, G.A., et al. [1985, p.143-145, eng] **41-2959**
- Photoadaptations of photosynthesis and carbon metabolism by antarctic phytoplankton: species-specific and community responses. Rivkin, R.B., et al. [1985, p.146-147, eng] **41-2960**
- Seasonal variation in phytoplankton and ice algae in shallow coast site. Perrin, R.A., et al. [1987, p.33-46, eng] **41-4084**
- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed. [1985, 160p., rus] **41-4118**
- Diatomaceous algae in water bodies of the Kolyma Power Plant. Kharitonov, V.G., [1985, p.91-105, rus] **41-4121**
- Plant ecology**
- Biocenotic structure of forests in different landscapes of central taiga. Volkov, A.D., et al. [1985, p.16-38, rus] **41-191**
- Phytocenotic and ecologic peculiarities of forest types prevailing in different landscapes of central taiga. Shelekhov, A.M., et al. [1985, p.38-45, rus] **41-192**
- Pine forest successions in Karelian taiga. Gromtsev, A.N., [1985, p.46-61, rus] **41-193**
- Economic and ecological effects of forestry in northern regions. Fokina, N.M., et al. [1985, p.33-38, rus] **41-207**
- Subdivision of the Barn zone according to vegetational cover. Belov, A.V., ed. [1985, 181p., rus] **41-252**
- Changes in vegetational cover induced by human factors. Nakhabetsva, S.F., et al. [1985, p.3-14, rus] **41-254**
- Ecological factors in the winter service. Dedic, O., [1985, p.11-16, ger] **41-385**
- Recent cryogenic problems of the Dokuchaev pedology. Makeyev, O.V., et al. [1986, p.118-125, rus] **41-522**
- High altitude flora of northern Tien Shan. Baltenov, M.S., [1985, 231p., rus] **41-551**
- Snow physics, avalanches, mudflows. Bolov, V.R., ed. [1985, 108p., rus] **41-836**
- Seasonal variations in temperatures of subalpine soils. Razumov, V.V., [1985, p.90-102, rus] **41-848**
- Winter factors in seasonal development of Alpine plants. Lynov, I.U.S., [1986, p.78-80, rus] **41-903**
- Plants in the Anadyr' River basin. Korobkov, A.A., et al. [1986, p.450-459, rus] **41-989**
- Photosynthesis of steppe plants in eastern Hangay. Slemnev, N.N., [1986, p.460-473, rus] **41-990**
- Climatic influence on trees in permafrost areas. Dashkovskaya, I.S., et al. [1984, p.49-56, rus] **41-1079**
- Differentiation in forest conditions of mountain regions and phytocenotic productivity. Ziganshin, R.A., [1984, p.78-87, rus] **41-1081**
- Estimating the productivity of northern taiga forests in Siberia. Mitrofanov, D.P., [1984, p.95-102, rus] **41-1082**
- Influence of paludification and forest fires on forest development. Glebov, F.Z., et al. [1984, p.133-141, rus] **41-1083**
- Flora of the Kanin Peninsula. Sergienko, V.G., [1986, 147p., rus] **41-1084**
- Peculiarities of weathering and soil formation in forest tundra of the Northern Ob' Region. Liverovskaya, I.T., et al. [1986, p.58-63, rus] **41-1164**
- Plant ecology at the alpine timberline, New Zealand. Norton, D.A., et al. [1984, p.361-370, eng] **41-1236**

- Environmental factors and growth of *Dryas octopetala*, Alaska. McGraw, J.B., [1985, p.229-239, eng] **41-1244**
- Southern tundras of Taymyr. Chernov, I.U.I., ed. [1986, 208p., rus] **41-1331**
- Vegetation of southern tundras in western Taymyr Peninsula. Matveeva, N.V., et al. [1986, p.5-67, rus] **41-1332**
- Hepatic mosses in southern tundra near Kresty village. Zhukova, A.L., [1986, p.80-88, rus] **41-1334**
- Vascular plant flora in the vicinity of Kresty village. Matveeva, N.V., et al. [1986, p.101-117, rus] **41-1336**
- Forms of vascular plants in the southern tundra subzone of Taymyr. Polozova, T.G., [1986, p.122-134, rus] **41-1337**
- Seasonal dynamics of plant communities in southern Taymyr tundra. Zanolka, L.L., [1986, p.135-150, rus] **41-1338**
- Alpine phytocenotic systems of the Subarctic. Norin, B.N., ed. [1986, 292p., rus] **41-1344**
- Carbon dioxide gas exchange components of tundra plants at various temperatures. Lediakina, N.A., et al. [1986, p.1067-1073, rus] **41-1455**
- Primary successions of Arctic tundras on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.99-105, rus] **41-1820**
- Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., [1986, p.49-67, rus] **41-1822**
- Pine needles unable to survive rapid temperature changes. Rodionov, V.S., et al. [1985, p.934-939, rus] **41-1827**
- Introduction of aconites into the Subarctic. Gorelova, A.P., [1986, 116p., rus] **41-1927**
- Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al. [1986, p.72-80, rus] **41-2250**
- Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al. [1986, p.72-80, rus] **41-2250**
- Development of taiga forests. Savina, L.N., [1986, 189p., rus] **41-2258**
- Fir trees. Krylov, G.V., et al. [1986, 238p., rus] **41-2259**
- Primary succession in Arctic tundra on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.148-156, eng] **41-2341**
- Kolgriv forest (ecological investigations). Sokolov, V.E., ed. [1986, 126p., rus] **41-2345**
- Vegetation, soils and ground water of central and southern taiga. Stepanov, A.M., et al. [1986, p.64-72, rus] **41-2347**
- Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Drosaceae-Leguminosae. Part 2. Family Leguminosae. Korobkov, A.A., et al. [1986, 188p., rus] **41-2361**
- Vegetation of snow patches, Gulf of Richmond, northern Quebec. Morin, H., et al. [1986, p.1515-1524, fr] **41-2367**
- All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks, Novosibirsk, Aug. 26-28, 1986. Summaries. [1986, 165p., rus] **41-2456**
- Preliminary results of studying mosses in the "Stolby" and Sayan-Shushenskoye preservation parks. Vasil'ev, A.N., [1986, p.70-72, rus] **41-2457**
- Botanical studies in Siberian preservation parks. Koropachinskii, I.I.U., et al. [1986, p.85-88, rus] **41-2458**
- Artificial coenosis as a plant protection method. Lubiagina, N.P., [1986, p.88-90, rus] **41-2459**
- Mixed-grass-ecode tundra soils of Wrangel Island. Orlovskii, S.D.D., [1986, p.98, rus] **41-2460**
- Eriophorum vaginatum* annual and latitudinal growth variation. Shaver, G.R., et al. [1986, p.1524-1535, eng] **41-2480**
- Liverwort mosses of the Matuyaykha river (Yamal Peninsula). Zhukova, A.L., et al. [1986, p.642-649, rus] **41-2561**
- Floristic findings in Penkigney Bay, Chukotskiy Peninsula. Sekretareva, N.A., [1986, p.677-683, rus] **41-2563**
- Studies of horizontal composition of marginal vegetation in the Salair taiga. Kirikova, L.A., et al. [1986, p.22-28, rus] **41-2600**
- Mechanisms of birch adaptation to conditions of the North. Ermakov, V.I., [1986, 144p., rus] **41-2751**
- Brio-lichenologic investigations in the USSR. Shliakov, R.N., ed. [1986, 118p., rus] **41-2775**
- Briophytes in the Polar-Alpine Botanical Garden. Konstantinova, N.A., et al. [1986, p.8-12, rus] **41-2776**
- Analysis of endemic species of moss flora in Central Asia. Mamatkulov, U.K., [1986, p.39-49, rus] **41-2777**
- Lichens in western Chukot highlands (Paliavaam River). Makarova, I.I., [1986, p.105-108, rus] **41-2778**
- Lichens in fir-spruce forests of Sikhote Alin Mountains. Skirina, I.F., et al. [1986, p.111-112, rus] **41-2779**
- Interrelations among components of biogeocenoses in southern taiga. Smirnov, A.V., ed. [1986, 120p., rus] **41-2898**
- Role of fires in taiga paludification. Liakhova, I.G., [1986, p.75-80, rus] **41-2899**

- Moisture deficiency in some trees during fall-winter seasons. Nevskii, L.M., [1986, p.97-100, rus] **41-2900**
- Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al, [1986, 112p., rus] **41-2902**
- New aquatic tundra plants. Vekhov, N.V., et al, [1986, p.1619-1620, rus] **41-3024**
- Grass-shrub vegetation developing on Arctic sand dunes. Sergienko, V.G., [1987, p.208-215, rus] **41-3610**
- Lichens from central East Greenland. Hansen, E.S., [1982, 36p., eng] **41-3788**
- Lichen distribution along an alpine tundra ridge in the High Uintas of northeastern Utah, U.S.A. St. Clair, L.L., [1985, 155p., eng] **41-3797**
- Vegetation of Mabel and Guker islands (Franz Josef Land archipelago). Safronova, I.N., [1986, p.51-63, rus] **41-3866**
- Diatomaceous algae in water bodies of the Kolyma Power Plant. Kharitonov, V.G., [1985, p.91-105, rus] **41-4121**
- See also:** Forest ecosystems
- Plant introduction**
- See:** Introduced plants
- Plant location**
- See:** Site surveys
- Plant physiology**
- Phytocenotic and ecologic peculiarities of forest types prevailing in different landscapes of central taiga. Shelekhov, A.M., et al, [1985, p.38-45, rus] **41-192**
- Oil spill impacts on meadow soils. Oderusova, T.G., [1985, p.27-31, rus] **41-256**
- Vegetation of a high Arctic tundra, Svalbard. Nimis, P.L., [1985, p.47-58, eng] **41-372**
- Winter factors in seasonal development of Alpine plants. Lynov, I.U.S., [1986, p.78-80, rus] **41-903**
- Photosynthesis of steppe plants in eastern Hangay. Slemnev, N.N., [1986, p.460-473, rus] **41-990**
- Climatic influence on trees in permafrost areas. Dashkovskaya, I.S., et al, [1984, p.49-56, rus] **41-1079**
- Fire effect on Siberian forests. Evdokimenko, M.D., [1984, p.56-65, rus] **41-1080**
- Differentiation in forest conditions of mountain regions and phytocenotic productivity. Ziganashin, R.A., [1984, p.78-87, rus] **41-1081**
- Estimating the productivity of northern taiga forests in Siberia. Mitrofanov, D.P., [1984, p.95-102, rus] **41-1082**
- Flora of the Kanin Peninsula. Sergienko, V.G., [1986, 147p., rus] **41-1084**
- Disturbance of tundra vegetation by oil field development. Tentiukov, M.P., et al, [1986, p.94-103, rus] **41-1172**
- Phytomass of Venezuelan paramo vegetation. Smith, J.M.B., et al, [1985, p.189-198, eng] **41-1229**
- Balsam poplar in northern Alaska. Edwards, M.E., et al, [1985, p.271-277, eng] **41-1248**
- Vascular plant flora in the vicinity of Kresty village. Matveeva, N.V., et al, [1986, p.101-117, rus] **41-1336**
- Interrelations between forest and swamp in western Siberia. Glebov, F.Z., [1986, p.145-152, rus] **41-1405**
- Carbon dioxide gas exchange components of tundra plants at various temperatures. Lediakina, N.A., et al, [1986, p.1067-1073, rus] **41-1455**
- Primary successions of Arctic tundras on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.99-105, rus] **41-1820**
- Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., [1986, p.49-67, rus] **41-1822**
- Pine needles unable to survive rapid temperature changes. Rodionov, V.S., et al, [1985, p.934-939, rus] **41-1827**
- Introduction of aconites into the Subarctic. Gorelova, A.P., [1986, 116p., rus] **41-1927**
- Reproduction of *Eriophorum vaginatum* by seed in Alaskan tussock tundra. Gartner, B.L., et al, [1986, p.1-18, eng] **41-2188**
- Environmental control of nutrients in Alaskan tussock tundra. Chapin, F.S., III, et al, [1986, p.167-195, eng] **41-2189**
- Development of taiga forests. Savina, L.N., [1986, 189p., rus] **41-2258**
- Fir trees. Krylov, G.V., et al, [1986, 238p., rus] **41-2259**
- Primary succession in Arctic tundra on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.148-156, eng] **41-2341**
- Kolmogoriv forest (ecological investigations). Sokolov, V.E., ed, [1986, 126p., rus] **41-2343**
- Structure of the basic spruce forest in southern taiga. Dylis, N.V., et al, [1986, p.6-22, rus] **41-2346**
- Vegetation, soils and ground water of central and southern taiga. Stepanov, A.M., et al, [1986, p.64-72, rus] **41-2347**
- Structure of the radiation and heat balance in Kolmogoriv forest. Rudnev, N.I., [1986, p.72-87, rus] **41-2348**
- Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae—Leguminosae. Part 2. Family Leguminosae. Korobkov, A.A., et al, [1986, 188p., rus] **41-2361**
- Liverwort mosses of the Matuiyakh river (Yamal Peninsula). Zhukova, A.L., et al, [1986, p.642-649, rus] **41-2561**
- Adaptation of boreal plants to Arctic conditions. Borisovskaya, G.M., et al, [1986, p.15-22, rus] **41-2599**
- Mechanisms of birch adaptation to conditions of the North. Ermakov, V.I., [1986, 144p., rus] **41-2751**
- Briophytes in the Polar-Alpine Botanical Garden. Konstantinova, N.A., et al, [1986, p.8-12, rus] **41-2776**
- Fumigation system for study of pollution and cold stress on plants. Lucas, P.W., et al, [1987, p.15-28, eng] **41-2858**
- Interrelationships among components of biogeocenoses in southern taiga. Smirnov, A.V., ed, [1986, 120p., rus] **41-2898**
- Moisture deficiency in some trees during fall-winter seasons. Nevskii, L.M., [1986, p.97-100, rus] **41-2900**
- Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al, [1986, 112p., rus] **41-2902**
- Floral processes. Wielgolaski, F.E., [1987, p.80-94, eng] **41-3235**
- Improved conductivity method for the measurement of frost hardness. Zhang, M.I.N., et al, [1987, p.710-715, eng] **41-3778**
- Vegetation of Mabel and Guker islands (Franz Josef Land archipelago). Safronova, I.N., [1986, p.51-63, rus] **41-3866**
- Diatomaceous algae in water bodies of the Kolyma Power Plant. Kharitonov, V.G., [1985, p.91-105, rus] **41-4121**
- Effect of a freeze-thaw cycle on properties of microsomal membranes from wheat. Borochoy, A., et al, [1987, p.131-134, eng] **41-4178**
- Plant tissues**
- Binding modes of water in plant leaves: a dielectric study. Pissis, P., et al, [1987, p.119-125, eng] **41-2223**
- Freezing and higher plants. Grout, B.W.W., [1986, p.203-207, eng] **41-2224**
- Adaptation of boreal plants to Arctic conditions. Borisovskaya, G.M., et al, [1986, p.15-22, rus] **41-2599**
- Plants (botany)**
- Mathematical modelling. Processes in complex economic and ecological systems. Samarskii, A.A., ed, [1986, 295p., rus] **41-547**
- Modeling tundra populations and communities. Barfikov, E.V., et al, [1986, p.207-219, rus] **41-548**
- Botany of Bouvet Island. [1986, 79p., eng] **41-915**
- General outline of the botanical investigations on Bouvetöya. Engelskjön, T., [1986, p.5-9, eng] **41-916**
- Macrolichens of Bouvetöya. Jørgensen, P.M., [1986, p.23-34, eng] **41-918**
- Crustose lichens of Bouvetöya. Øvstedal, D.O., [1986, p.35-56, eng] **41-919**
- Lichenicolous ascomycetes from Bouvetöya. Øvstedal, D.O., et al, [1986, p.57-60, eng] **41-920**
- Lamprospora miniatopsis* Spooner, a bryophilous discomycete from Bouvetöya. Schumacher, T., [1986, p.61-64, eng] **41-921**
- Algal vegetation of Bouvet Island. Klaveness, D., et al, [1986, p.65-69, eng] **41-922**
- Phytogeographical relations of the cryptogamic flora of Bouvetöya. Engelskjön, T., et al, [1986, p.71-79, eng] **41-923**
- Patterns of High Arctic saxifrages. Grulke, N.E., et al, [1985, p.241-250, eng] **41-1245**
- Vascular plants of mountain talus slopes, Mt. Rae area, Alberta, Canada. Kershaw, L.J., et al, [1986, p.218-230, eng] **41-1256**
- Floristic patterns on avalanche paths in the northern Rocky Mountains, USA. Manolson, G.P., et al, [1986, p.231-238, eng] **41-1257**
- Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae—Leguminosae. Part 2. Family Leguminosae. Korobkov, A.A., et al, [1986, 188p., rus] **41-2361**
- Wellsite cleanup on the National Petroleum Reserve, Alaska. Smith, P.D.J., [1986, 49p. + append., eng] **41-2450**
- Nitrogen-fixing pseudomonads from Arctic plant roots. Lifshitz, R., et al, [1986, p.251-255, eng] **41-2493**
- Adaptation of boreal plants to Arctic conditions. Borisovskaya, G.M., et al, [1986, p.15-22, rus] **41-2599**
- See also:** Algae; Grasses; Introduced plants; Lichens; Mosses; Trees (plants); Vegetation
- Plants (industries)**
- See:** Chemical plants; Industrial buildings
- Plastic coatings**
- See:** Protective coatings
- Plastic deformation**
- Origin of kinks in polycrystalline ice. Wilson, C.J.L., et al, [1986, p.27-48, eng] **41-1036**
- Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] **41-2962**
- Plastic properties**
- Durability of concrete with a superplasticizing admixture. Dhir, R., et al, [1987, p.741-764, eng] **41-3704**
- Using thermopiles in cooling plastic frozen ground. Petrov, B.G., et al, [1983, p.94-107, rus] **41-4480**
- See also:** Ice plasticity
- Plasticity**
- Ice dynamics. Hibler, W.D., III, [1986, p.577-640, eng] **41-2995**
- Plastics**
- Waterproofing interlayers for the improvement of water- and thermal regime of roadbeds. Ruvinskii, V.I., et al, [1985, p.23-24, rus] **41-502**
- See also:** Cellular plastics
- Plastics ice friction**
- Tribotechnical properties of fluoroplastic-4 and super-high molecular polyethylene in contact with ice and snow. Egorov, E.N., et al, [1984, p.8-10, rus] **41-4505**
- Adfreezing of the materials of skis' sliding surfaces to snow and ice. Ermakov, K.K., [1984, p.10-12, rus] **41-4506**
- Derivation of the polymer-snow friction coefficient. Ermakov, K.K., [1984, p.12-15, rus] **41-4507**
- Plastics snow friction**
- Friction on snow of ski soles, unwaxed and waxed. Shimbo, M., [1971, p.99-112, eng] **41-3907**
- Tribotechnical properties of fluoroplastic-4 and super-high molecular polyethylene in contact with ice and snow. Egorov, E.N., et al, [1984, p.8-10, rus] **41-4505**
- Adfreezing of the materials of skis' sliding surfaces to snow and ice. Ermakov, K.K., [1984, p.10-12, rus] **41-4506**
- Derivation of the polymer-snow friction coefficient. Ermakov, K.K., [1984, p.12-15, rus] **41-4507**
- Plates**
- Wind, earthquake, snow, and hail loads on solar collectors. Cattaneo, L., et al, [1981, 88p., eng] **41-173**
- Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985). Sal'nikov, P.I., ed, [1985, 119p., rus] **41-276**
- Designing foundations for different ground conditions. Trofimovich, N.V., [1985, p.39-41, rus] **41-293**
- Shields designed to counteract frost heave. Pchelintsev, A.M., [1985, p.41-42, rus] **41-294**
- Frost formation between closely spaced parallel plates. Kamath, J., [1985, 121p., eng] **41-985**
- Steel plates for arctic offshore structures. Itoh, K., et al, [1986, p.807-832, eng] **41-1134**
- Steel plates for offshore structures used in icy seas. Hattori, K., et al, [1984, p.35-52, eng] **41-1192**
- Weld properties for ultra-heavy steel plates for offshore structures. Homma, H., et al, [1984, p.53-59, eng] **41-1193**
- Viscoelasticity of floating ice plates under loads. Hui, D., [1986, p.135-143, eng] **41-1212**
- Structures of foundations designed for perennially frozen strongly deformable grounds. Kogodovskii, O.A., et al, [1986, p.29-32, rus] **41-2797**
- Large heat input welds for arctic offshore structures. Watanabe, S., et al, [1986, p.B-284, eng] **41-3939**
- Pleistocene**
- Paleogeological investigations of fossil ground ice in permafrost. Kaplanskaya, F.A., et al, [1986, p.65-72, rus] **41-107**
- Maximum southward advance of the Kara center ice sheet. Diatlova, I.N., [1986, p.154-157, rus] **41-125**
- Climate and vegetation of Primor'e as affected by Pleistocene glaciation. Shumova, G.M., et al, [1986, p.157-161, rus] **41-126**
- Late Quaternary glacial chronology for Baffin Island, NWT. Dowdeswell, J.A., [1984, p.311-320, eng] **41-1233**
- Model of Pleistocene glaciation of the system "glaciers-ocean-troposphere-aesthenosphere". Karachenov, A.T., [1986, p.38-45, rus] **41-1635**
- Arctic shelf in the late Pleistocene and certain problems of paleogeology. Vozovik, I.U.I., [1986, p.449-452, eng] **41-2572**
- Baffin Bay environmental change during last interglacial/glacial transition. Andrews, J.T., et al, [1985, p.333-355, eng] **41-2682**
- Reconstructions of Wisconsinan Laurentide ice sheet. Fisher, D.A., et al, [1985, p.229-238, eng] **41-2760**
- Influence of neotectonics on the development of cryogenic formations. Sukhov, A.G., et al, [1986, p.103-115, rus] **41-2826**
- Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed, [1986, 165p., rus] **41-3428**
- Oxygen-isotope composition in the ocean-glacier system. Nikolaev, V.I., et al, [1985, p.172-174, rus] **41-3538**
- Paleogeological studies of relic ground ice in permafrost. Kaplanskaya, F.A., et al, [1986, p.257-266, eng] **41-3616**
- Ice-wedge casts in the Severn estuary, S.W. Britain. Allen, J.R.L., [1987, p.109-118, eng] **41-4520**
- See also:** Ice age theory

- Podsol**  
Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed. [1986, 198p., rus] 41-2373  
Clear-felling impact on properties of sandy podzols in northern Karelia. Lazareva, I.P., et al. [1986, p.61-79, rus] 41-2376  
Biologic activity of forest soils. Korsunov, V.M., ed. [1985, 122p., rus] 41-4109  
Microflora in forest soils of the Lower Angara depression. Vishniakova, Z.V., et al. [1985, p.88-101, rus] 41-4112  
Humus profiles in the paludified loamy podzols of taiga. Vtiurin, G.M., [1986, p.78-88, rus] 41-4565
- Polar regions**  
Atlas of the Arctic. Treshnikov, A.F., ed. [1985, 204p., rus] 41-701  
Swedish and Nordic polar research. Karlqvist, A., [1986, p.105-112, eng] 41-967  
Northern Information Networking Conference. Final report. Cote, D., ed. [1986, 83p., eng] 41-1567  
German automatic weather stations in the Arctic 1942-1945. Selinger, F., [1986, p.89-104, eng] 41-2339  
United States: an arctic nation. [1987, 46p., eng] 41-2566  
Methods of compiling general radar maps of polar regions. Bondina, T.V., et al. [1986, p.58-63, rus] 41-2717  
National needs in Arctic research. Washburn, A.L., [1987, p.2-9, eng] 41-2764  
Atlas of the polar regions. [1985, 66p., eng] 41-2884  
Operation Deep Freeze 87 end of season report. [1987, Var. p., eng] 41-3164  
Canada and polar science. Adams, W.P., et al. [1987, 116p. + append., eng] 41-3414  
Report of the U.S. Arctic Research Commission, 1985. [1986, 33p., eng] 41-3425  
Impact of present century climate fluctuations in the Northern Hemisphere. Wallén, C.C., [1986, p.245-278, eng] 41-3559  
Polar research. Spletstoesser, J., [1986, p.47-49, eng] 41-3955  
Polar research. Spletstoesser, J., [1987, p.49-50, eng] 41-3956  
Grain growth in polar ice: Pts. 1 and 2. Alley, R.B., et al. [1986, p.415-433, eng] 41-4297  
See also: Arctic landscapes
- Polarization (waves)**  
Model studies of surface noise interference in ground-probing radar. Arcene, S.A., et al. [1985, 23p., eng] 41-447
- Pollen**  
Pollen, vegetation and climatic relationships along the Dalton Highway, Alaska. Short, S.K., et al. [1986, p.57-72, eng] 41-1188  
Balsam poplar in northern Alaska. Edwards, M.E., et al. [1985, p.271-277, eng] 41-1248  
Pollen deposition and distribution of shrubs in the Arctic tundra. Jacobs, J.D., et al. [1985, p.279-287, eng] 41-1249  
Pollen record from the Agassiz Ice Cap, northern Ellesmere Island, Canada. Bourgeois, J.C., [1986, p.345-354, eng] 41-3470  
See also: Palynology
- Pollution**  
Forest fire effect on chemical composition of snow cover. Ivanov, A.V., [1986, p.180-186, rus] 41-131  
Freezing effect on waste contaminants. Iskandar, I.K., [1986, 33p., eng] 41-693  
Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Brattsev, A.P., ed. [1986, 119p., rus] 41-1167  
Reaction of tundra vegetation to petroleum pollution induced by drilling. Gnat, L.V., [1986, p.82-93, rus] 41-1171  
Some problems in rationalizing the use of natural resources in the BAM zone. Mikhailov, I.U., [1986, p.35-44, rus] 41-2248  
Petroleum engineering impact on northern swamps. Polkoshnikova, O.V., et al. [1982, p.198-209, eng] 41-2344  
Ecologic problems of protecting living organisms in northern seas. Matishov, G.G., et al. [1986, p.13-16, rus] 41-2387  
Wellsite cleanup on the National Petroleum Reserve, Alaska. Smith, P.D.J., [1986, 49p. + append., eng] 41-2450  
Tundra plant responses on the National Petroleum Reserve, Alaska. McKendrick, J.D., [1986, 225p., eng] 41-2452  
Low temperature effects on organophosphonate. Britton, K.B., [1986, 47 refs., eng] 41-3050  
Study of organochlorine pollutants in snow at North Pole. Paasivirta, J., et al. [1987, p.24-31, eng] 41-3370  
Losses of explosive residues on disposable membrane filters. Jenlins, T.F., et al. [1987, 25p., eng] 41-3820  
Natural associations of the Arctic and their protection. Korotkevich, E.S., ed. [1986, 120p., rus] 41-3860  
Oil spill effect on melting temperature of sea ice. Izmailov, V.V., [1986, p.113-117, rus] 41-3868  
Estimation of industrial emission into the atmosphere. Boiarkina, A.P., et al. [1987, p.14-23, rus] 41-3945  
Content of mercury in the snow cover of Pribyalka. Poslovina, A.L., et al. [1987, p.56-60, rus] 41-3946  
Geochemical evaluation of the environmental impact of human activities. Davydova, N.D., [1986, p.135-143, rus] 41-4114  
Changes induced by industrial activities in the Upper Kolyma basin. Grigor'eva, N.N., et al. [1986, p.9-13, rus] 41-4467  
Environmental impact of industrial undertakings. Krivolutski, D.A., ed. [1987, 320p., rus] 41-4567  
Pollution impact on the environmental functions of northern taiga. Chertovskoi, V.G., [1987, p.67-72, rus] 41-4569  
See also: Air pollution; Impurities; Oil spills; Soil pollution; Water pollution
- Polygonal topography**  
Climatic reconstructions from geocryological data. Danilov, I.D., et al. [1986, p.61-65, rus] 41-106  
Quaternary research (Selected papers of the 11th INQUA Congress). Kartashov, I.P., ed. [1986, 200p., rus] 41-549  
Mars: periglacial and glacial relief forms. Lucchitta, B.K., [1986, p.183-193, rus] 41-550  
Methods of studying cryogenic relief-forming processes at research stations. Zhigarev, L.A., et al. [1986, p.111-119, rus] 41-1199  
Landscape indication methods of interpretation used in forest tundra surveys. Kiuntsel', V.V., [1986, p.118-121, rus] 41-1539  
Classification of exogenic relief-forming processes on land. Vyrkin, V.B., [1986, p.20-24, rus] 41-2247  
Buried soils of northeastern Yakutia (the Khallerchinskaya tundra). Fominykh, L.A., et al. [1986, p.109-120, rus] 41-2354  
Cryogenic processes in the formation of swamp microrelief. Maksimova, L.N., et al. [1986, p.147-151, rus] 41-2833  
Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al. [1987, 144p., rus] 41-2983  
Methods of evaluating and mapping the susceptibility of cryogenic landscapes. Fedorov, A.N., et al. [1986, p.121-133, rus] 41-3493  
Climatic reconstructions from geocryological data. Danilov, I.D., et al. [1986, p.303-308, eng] 41-3621  
Development of ice-wedge polygon formations. Romanovskii, N.N., [1972, p.33-41, rus] 41-3747  
Sedimentary deposits in the northern lowland plains, Mars. Lucchitta, B.K., et al. [1986, p.E166-E174, eng] 41-3749  
Development of ice-vein pseudomorphs in the Russian plain. Minervin, A.V., et al. [1986, p.90-100, rus] 41-4469  
See also: Patterned ground
- Polymers**  
Polymer cavitation-resistant coatings of the Bratsk Dam spillway. Dymant, A.N., et al. [1985, p.58-63, rus] 41-433  
X ray attenuation at low temperatures in polymer silica fibers. Barnes, C.E., et al. [1981, p.25-34, eng] 41-580  
High frost resistance of concrete objects impregnated with polymer solutions. Belov, L.F., et al. [1985, p.41-50, rus] 41-1544  
Glass freezing as kinetics time scale singularity of new significance. Larsen, U., [1986, p.248-253, eng] 41-1621  
Polymer modified concrete. Blaga, A., et al. [1985, 4p., eng] 41-1940  
Composites for extreme environments [1982, 179p., eng] 41-1987  
Thermophysical properties data on graphite/polyimide composite materials. Campbell, M.D., et al. [1982, p.54-72, eng] 41-1988  
Behavior of graphite/polyimide composites at extreme temperatures. Garber, L.P., et al. [1982, p.73-91, eng] 41-1989  
Environmental exposure of carbon/epoxy composite material systems. Givler, R.C., et al. [1982, p.137-147, eng] 41-1991  
Polymer concrete mix takes to cold weather. Crichton, W., [1987, p.32, eng] 41-2525  
Interaction of polymer admixtures with cements in concretes. Kozlova, V.K., et al. [1986, p.59-62, rus] 41-2756  
Non-isothermal and transient flow of molten polymer in an open rectangular cavity. Flaman, A.A.M., et al. [1986, p.1751-1754, eng] 41-3294  
Making more durable concrete with polymeric fibers. Vondran, G., [1987, p.377-396, eng] 41-3697  
Freeze-thaw resistance of polymer modified concrete. Balaguru, P., et al. [1987, p.863-876, eng] 41-3710  
Tribotechnical properties of fluoroplastic-4 and super-high molecular polyethylene in contact with ice and snow. Egorov, E.N., et al. [1984, p.8-10, rus] 41-4505  
Derivation of the polymer-snow friction coefficient. Ermakov, K.K., [1984, p.12-15, rus] 41-4507
- Polynyas**  
Nature of winter ruptures in sea ice covers. Gorbunov, I.U.A., et al. [1986, p.131-134, rus] 41-121  
Reports of US/USSR Weddell Polynya Expedition, Vol.8. Ackley, S.F., ed. [1986, 158p., eng] 41-460
- Glaciology and climatology of the North Water polynya, Baffin Bay. Muller, F., et al. [1976, 128p., eng] 41-606  
Boundary layer studies at Terra Nova Bay. Bromwich, D.H., [1986, p.13-16, eng] 41-1073  
Bulk transfer coefficients for heat and momentum over leads and polynyas. Andreas, E.L., et al. [1986, p.1875-1883, eng] 41-2220  
Ice dynamics in the Weddell Sea, 1980. Golosov, V.V., [1986, p.103-108, rus] 41-2723  
Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al. [1986, p.21-23, eng] 41-2941  
Modern sediments of the Terra Nova Bay polynya. Hughes, P., et al. [1985, p.107-108, eng] 41-2949  
Air-ice-ocean coupled model for the formation of leads or polynyas. Chu, P.C., [1986, p.79-88, eng] 41-3061  
In situ burning of oil in experimental ice leads. Brown, H.M., et al. [1987, 27p., eng] 41-3075  
Recurring polynyas over the Cosmonaut Sea and the Maud Rise. Comiso, J.C., et al. [1987, p.2819-2833, eng] 41-3080  
Arctic seas that never freeze. Dunbar, M.J., [1987, p.50-53, eng] 41-3149  
Determining some characteristics of fast and drifting ice with the meteorological radar-2 station. Komarov, A.V., et al. [1985, p.66-70, rus] 41-3430  
Role of standing waves in dynamics of Weddell Sea ice sheet. Seidov, D.G., et al. [1986, p.90-93, eng] 41-3681  
Reserved zones of Franz Josef Land. Uspenskii, S.M., et al. [1986, p.7-18, rus] 41-3861  
Seismic survey of the Arctic island channels using open water leads. Sonnichsen, G.V., et al. [1987, p.877-882, eng] 41-4015  
Soviet-American field experiment "Weddell-POLEX-81". Sarukhanian, E.I., [1986, p.9-18, rus] 41-4182  
Thermohaline water stratification in the southern ocean from ice cover data. Bagriantsev, N.V., et al. [1986, p.18-27, rus] 41-4183  
Weddell-POLEX-81 observations of atmospheric circulation over the Atlantic. Lysakov, E.P., [1986, p.45-49, rus] 41-4186  
Influence of atmospheric circulation on the formation of Weddell polynya. Lysakov, E.P., et al. [1986, p.52-56, rus] 41-4187  
Meso- and macroscale air-sea interaction processes in the South Atlantic Ocean. Vasil'ev, V.F., et al. [1986, p.62-67, rus] 41-4188  
Small-scale interaction between atmosphere and ocean at Maud Rise. Makhshtas, A.P., et al. [1986, p.67-71, rus] 41-4189  
Ice conditions during the Mikhail Somov cruise in a Soviet antarctic expedition. Proshutinskii, A.I.U., et al. [1986, p.75-78, rus] 41-4190  
Ice distribution in Arctic seas of the North American shelf. Smirnov, V.I., [1986, p.35-40, rus] 41-4194  
Ice movement according to the FGGE buoys. Losev, S.M., et al. [1986, p.77-88, rus] 41-4199  
Ice movement in the Arctic Ocean according to the FGGE Buoys. Gorbunov, I.U.A., et al. [1986, p.96-103, rus] 41-4202  
Disturbances of the continuity of sea-ice covers in winter. Gorbunov, I.U.A., et al. [1986, p.110-116, rus] 41-4204  
Size of wind-driven coastal polynyas. Pease, C.H., [1987, p.7049-7059, eng] 41-4260  
Ice conditions of an arctic polynya: North Water in winter. Steffen, K., [1986, p.383-390, eng] 41-4293  
See also: Ice openings
- Ponds**  
Chemistry of a temperate pond's decaying winter cover. Kingsbury, C.M., et al. [1984, p.139-142, eng] 41-1954  
Ice cover effect on Odonata larvae in a pond. Beresford, D., [1984, p.165-181, eng] 41-1958  
Frozen tailings pond dams. LaFleche, P.T., et al. [1987, p.191-197, eng] 41-4012
- Pontoon bridges**  
March under arctic conditions. Makarov, V., [1986, p.74-76, rus] 41-3932
- Porosity**  
Amorphous and porous ices in cometary nuclei. Smoluchowski, R., [1985, p.397-406, eng] 41-1714  
Saturated porous layer beneath active ice stream. Blankenship, D.D., et al. [1986, p.54-57, eng] 41-1779  
Freeze-thaw of pore moisture in sandy rocks. Medvedskii, R.I., [1986, p.543-549, eng] 41-1894  
Determining heat conductivity coefficients of coarse grained materials used in embankment construction. Gorokhov, E.N., [1985, p.105-110, rus] 41-3130  
Sea ice salinity and porosity changes during storage. Cox, G.F.N., et al. [1986, p.371-375, eng] 41-4291  
Deformation of pore-space structure in freezing fines. Lebedenko, I.U.P., [1987, p.50-63, rus] 41-4622
- Porous materials**  
Freezing of liquid-saturated porous media. Weaver, J.A., et al. [1986, p.654-659, eng] 41-396  
Melting process in ice-air composite materials. Aoki, K., et al. [1986, p.2138-2144, eng] 41-532



- Natural convection in sloping porous layers. Powers, D.J., et al, [1986, p.697-710, eng] 41-608
- Moisture in hygroscopic materials. Efimov, S.S., [1986, 160p., rus] 41-1044
- Melting of frozen porous media contained in a cylindrical capsule. Weaver, J.A., et al, [1986, p.1943-1951, eng] 41-2524
- Transient heat transfer in porous thermal insulations. Tong, T.W., et al, [1986, p.703-708, eng] 41-3290
- Experimental investigations of heat-mass transfer coefficients in macroporous media. Mukhetdinov, N.A., [1986, p.119-127, rus] 41-3455
- Crystallization of freezing mixture in porous media. Entov, V.M., et al, [1986, p.447-449, eng] 41-3628
- Sublimation of a frozen semi-infinite porous medium. Fey, Y.C., et al, [1987, p.771-779, eng] 41-3943
- Ports**
- Geography of marine navigation. Nadtochi, G.L., [1985, 263p., rus] 41-1353
- Selection of optimal dimensions for hydraulic structures in ports. Piniagin, B.A., et al, [1986, p.77-81, rus] 41-1396
- Welded groove-and-tongue profiles for high strength bulkheads. Kuznetsov, A.I., et al, [1986, p.26-28, rus] 41-1534
- Shore based wave generators for ice management at cold region harbours. Andersen, P.F., [1986, p.479-499, eng] 41-1614
- How to moor in ice. Braginets, O., [1986, p.60-61, rus] 41-1792
- Thunder Bay management program, 1979-1985: overview report. Gillies, T.K., [1986, 86p., eng] 41-2184
- Hydraulic construction in ports and engineering research in coastal zones of seas. Kostikov, V.D., ed, [1986, 169p., rus] 41-2709
- Harbor design for ice conditions. Wortley, C.A., [1987, p.14-15, eng] 41-3410
- Ice dams for protecting water areas of northern ports. Bogoslovskii, P.A., et al, [1987, p.78-80, rus] 41-3652
- Power generation**
- See: Electric power
- Power line icing**
- Countermeasures against damage by heavy snowfall in Nagano District. Tsuchiya, Y., [1985, p.9-12, jpn] 41-177
- Countermeasures against damage by heavy snowfall in Akita District. Iwasawa, S., [1985, p.16, jpn] 41-179
- Countermeasures against damage by heavy snowfall in Yonago District. Takahashi, T., [1985, p.17-18, jpn] 41-180
- Countermeasures for ice and snow accumulation on transmission lines. Asai, S., [1985, p.26-27, jpn] 41-183
- Countermeasures against damage by snowfall on distribution facilities. Kato, I., [1985, p.29-32, jpn] 41-184
- Countermeasures against ice coating on trolley wires in Chiba District. Terada, S., [1985, p.37-38, jpn] 41-185
- Countermeasures against damage by snowfall on distribution cable arrester. [1985, p.41-43, jpn] 41-186
- Calculating wind loads on power line supports, allowing for icing. Kholodov, V.V., et al, [1986, p.66-68, rus] 41-885
- Ice adhesion to structural materials. Kozlovskaya, R.T., et al, [1982, p.96-101, rus] 41-1274
- Ice accretion measurement on a wire at Mt. Washington. McComber, P., et al, [1985, p.131-141, eng] 41-4490
- Computer interfacing of meteorological sensors in severe weather. Rancourt, K., et al, [1985, p.205-211, eng] 41-1496
- Improvement of structures, methods of design, and construction of railroad electrification, signalization and centralization block and communication systems. Shurygin, V.P., ed, [1985, p.121p., rus] 41-1541
- Ice loads on power lines in windy weather. Shurygin, V.P., et al, [1985, p.100-107, rus] 41-1545
- Overhead line icing. Fernet, M., [1986, p.2-8, fre] 41-1559
- Design of overhead lines to withstand climatic phenomena. Vieille, J., [1986, p.9-13, fre] 41-1560
- Design of transmission overhead lines for cold climate. Chanal, A., et al, [1986, p.14-22, fre] 41-1561
- Formula for calculating ice and wind loads on wires. Gonchar, L.G., et al, [1986, p.37-38, rus] 41-1923
- Apparatus for deicing of trolley wires. Shimada, A., et al, [1980, 12 col. + 5 sheets, eng] 41-2372
- High-voltage network for areas of increased intensity of icing. Genikh, G.A., et al, [1976, 38 col. + 22 sheets, eng] 41-2497
- Calculating harmonic component levels when heating iced power lines. Zhezhelenko, I.V., et al, [1986, p.16-21, rus] 41-2546
- Icing and wind loading on a simulated power line. Govoni, J.W., et al, [1986, p.23-27, eng] 41-2967
- Probabilities of ice, wind and temperature loads on electrical transmission lines. Gartsman, L.B., [1987, 200p., rus] 41-3245
- Detectors of icing on overhead power lines. Mamin, F.N., et al, [1987, p.49-51, rus] 41-3612
- Ice accretion on cables of various cross-sections. Baker, P.C., et al, [1986, p.11-28, eng] 41-3796
- Atmospheric icing load measurements on a cable using the end tension. McComber, P., et al, [1987, p.131-141, eng] 41-4490
- Power line supports**
- Pile-foundation supports of power lines in the southern Far East. Tiurin, I.M., [1985, p.63-64, rus] 41-307
- Calculating wind loads on power line supports, allowing for icing. Kholodov, V.V., et al, [1986, p.66-68, rus] 41-885
- Improvement of structures, methods of design, and construction of railroad electrification, signalization and centralization block and communication systems. Shurygin, V.P., ed, [1985, p.121p., rus] 41-1541
- Properties of combined aggregate concretes of centrifuged power line supports. Shurygin, V.P., et al, [1985, p.5-11, rus] 41-1542
- Heat transfer between concrete power line supports and permafrost. Tsukanov, N.A., et al, [1985, p.21-32, rus] 41-1543
- High frost resistance of concrete objects impregnated with polymer solutions. Belov, L.F., et al, [1985, p.41-50, rus] 41-1544
- Bulletin of scientific-technical information. Power engineering of Southern Yakutia. Petrov, N.A., ed, [1984, 32p., rus] 41-1829
- Depth of sinking power-line support foundations. Argunov, L.I., [1984, p.11-13, rus] 41-1831
- Load lifter for installing power lines in northern swamps. Mandrikov, V.I., et al, [1986, p.23-25, rus] 41-1921
- Construction of electric power lines for main pipelines. Manual. Arnopolin, A.G., et al, [1986, 164p. (Pertinent p.127-138), rus] 41-2890
- Icing and wind loading on a simulated power line. Govoni, J.W., et al, [1986, p.23-27, eng] 41-2967
- Long river crossings of overhead power lines. Elenbogen, G.N., et al, [1987, p.2-9, rus] 41-3611
- Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed, [1983, 123p., rus] 41-4470
- Using thermopiles in network construction. Smirnov, V.N., [1983, p.108-118, rus] 41-4481
- Power lines**
- Load lifter for installing power lines in northern swamps. Mandrikov, V.I., et al, [1986, p.23-25, rus] 41-1921
- Long river crossings of overhead power lines. Elenbogen, G.N., et al, [1987, p.2-9, rus] 41-3611
- Using thermopiles in network construction. Smirnov, V.N., [1983, p.108-118, rus] 41-4481
- See also: Transmission lines
- Power supply**
- See: Electric power
- Precast concretes**
- Durability considerations—precast concrete pipe. Bealey, M., [1987, p.493-508, eng] 41-3699
- Durability of high-strength concrete containing a high range water reducer. Robson, G., [1987, p.765-780, eng] 41-3705
- Precipitation gages**
- Winter precipitation in central New Brunswick, Canada. Palmer, D.C., [1985, p.230-236, eng] 41-1498
- Precipitation (meteorology)**
- Hydrometeor distributions in California rainbands. Gordon, G.L., et al, [1982, p.207-210, eng] 41-17
- Precipitation near the top of a maritime convective cloud. Willis, P.T., et al, [1982, p.211-214, eng] 41-18
- Ice evolution versus precipitation in the Duero Basin. Vali, G., et al, [1982, p.218-221, eng] 41-20
- Case study of hydrometeors in Florida cumuli. Parungo, F., et al, [1982, p.366-369, eng] 41-36
- Description of the building materials data base for Portland, Maine. Merry, C.J., et al, [1986, 83p., eng] 41-662
- Glacier variations and their causes, Patagonia, Chile. Aniya, M., et al, [1986, p.307-316, eng] 41-1178
- Outline of avalanches in China. Wang, Y., et al, [1986, p.11-18, eng] 41-1300
- Study on land evaporation and dry-wet state of Qinghai-Xizang Plateau. Zeng, Q., et al, [1986, p.131-142, chi] 41-1460
- Long-term record of H2O2 in polar ice cores. Neftel, A., et al, [1986, p.262-270, eng] 41-1756
- Analysis of a polar low in the Norwegian Sea, 29 February-1 March 1984. Rabbe, A., [1986, p.91-103, eng] 41-1801
- Potential effects of acid rain on glaciated terrain. Shilts, W.W., [1984, p.135-156, eng] 41-2117
- Storm precipitation and snowmelt temperature, Clearwater River, Idaho. Schwarz, F.K., [1986, 146p., eng] 41-2215
- Inventorying building materials. Merry, C.J., [1986, 25p., eng] 41-2530
- Climate overview of the Canadian inland sea. Maxwell, J.B., [1986, p.79-100, eng] 41-2592
- Alaska snow surveys and Federal-state-private cooperative snow surveys. [1987, 3 pieces, eng] 41-3313
- Alaska snow surveys, 1986 annual data summary. [1986, 17p. + map, eng] 41-3355
- Description of the building materials data base for Cincinnati, Ohio. Merry, C.J., et al, [1986, 85p., eng] 41-3498
- Coalescence-freezing precipitation mechanism. Braham, R.R., Jr., [1986, p.142-145, eng] 41-3752
- Characteristics of precipitation and vertical structure of air temperature in the northern Patagonia. Fujiyoshi, Y., et al, [1987, p.15-23, eng] 41-3823
- Shape and size distributions of hailstones. Wang, P.K., et al, [1987, p.1062-1070, eng] 41-3851
- Comparison between Landsat cloud images and precipitation radar echoes. Endoh, T., et al, [1986, p.121-131, jpn] 41-3885
- Meteorological features in Langtang Valley, Nepal Himalayas, 1985-1986. Takahashi, S., et al, [1987, p.35-40, eng] 41-3913
- Altitudinal dependence of precipitation in Langtang Valley, Nepal Himalayas. Seko, K., [1987, p.41-47, eng] 41-3914
- Studying pollutant accumulation in air, snow and vegetation. Kazachevskii, I.V., et al, [1987, p.91-102, rus] 41-3947
- Method for monthly charting of atmospheric precipitation. Briazgin, N.N., [1986, p.109-116, eng] 41-3954
- Method of automatic calibration of the tank model (fifth report)—automatic or semi-automatic procedures to calibrate the multiplication factor of the precipitation in snowy basins. Sugawara, M., et al, [1987, p.87-113, jpn] 41-4003
- Precipitation in the cold season, St. Louis, MO. Huff, F.A., et al, [1986, p.1887-1907, eng] 41-4056
- On snow particles comprising an aggregate. Fujiyoshi, Y., et al, [1984, p.87-90, eng] 41-4376
- Geographic winter storm structure in California. Marwitz, J.D., [1984, p.315-316, eng] 41-4403
- Precipitation initiation through cloud seeding. English, M., et al, [1984, p.707-710, eng] 41-4412
- Examination of double-plate ice crystals and the initiation of precipitation in continental cumulus clouds. Bruinjes, R.T., et al, [1987, p.1331-1349, eng] 41-4424
- Climatic atlas. Map series 2—Precipitation. [1986, 2p. + 48p. of maps, eng] 41-4521
- Estimating the effect of atmospheric precipitation on sea-ice radar images. Aleksandrov, V.I.U., [1987, p.37-43, rus] 41-4619
- See also: Rain; Snowfall
- Prefabrication**
- Construction of low-rise buildings on seasonally freezing gravelly grounds. Polishchuk, A.I., et al, [1985, p.30-32, rus] 41-289
- Reducing the amount of cement and fuel used in the production of prefabricated reinforced concrete. Dvorkin, L.I., [1985, 99p. (Pertinent p.50-69), rus] 41-650
- Selection of optimal dimensions for hydraulic structures in ports. Piniagin, B.A., et al, [1986, p.77-81, rus] 41-1396
- Analyzing transportation costs of modular construction objects in permafrost regions. Rastorguev, G.A., [1986, p.19-20, rus] 41-1527
- High frost resistance of concrete objects impregnated with polymer solutions. Belov, L.F., et al, [1985, p.41-50, rus] 41-1544
- Effective sectional road pavements for northern regions and Siberia. Karpov, B.N., et al, [1986, 96p., rus] 41-2211
- Increasing the thermoinsulating properties of lightweight concrete panels. Natsievskii, I.U.D., [1986, 88p., rus] 41-2647
- Designing moorings built of fused enlarged blocks. Goncharov, V.V., et al, [1986, p.25-26, rus] 41-2788
- For northern construction sites. Malyshev, A.I.A., [1986, p.49-50, rus] 41-2792
- Structures of foundations designed for perennially frozen strongly deformable grounds. Kogodovskii, O.A., et al, [1986, p.29-32, rus] 41-2797
- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] 41-2919
- Reducing the amount of construction materials needed under conditions of Siberia and the Far East. Nesterov, V.V., [1986, 136p., rus] 41-3137
- Building stone-earth-fill dams in the North. Kogodovskii, O.A., [1986, p.171-182, rus] 41-3460
- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., [1987, 208p., rus] 41-3804
- Preserving**
- Storage of vegetables by the use of snow. Muramatsu, K., [1986, p.149-157, jpn] 41-1219
- Freezing and higher plants. Grout, B.W.W., [1986, p.203-207, eng] 41-2224
- Pressure**
- Friction on snow of ski soles, unwaxed and waxed. Shimbo, M., [1971, p.99-112, eng] 41-3907
- Melting temperature of ice at positive and negative pressures. Henderson, S.J., et al, [1987, p.3069-3072, eng] 41-4126
- See also: Atmospheric pressure; Ice pressure; Soil pressure; Vapor pressure; Water pressure; Wind pressure
- Pressure ridges**
- On the spacing and draft distributions for pressure ridge keels. Wadhams, P., et al, [1986, p.10,697-10,708, eng] 41-1009

**Pressure ridges (cont.)**

- Nearfield noise measurements from an Arctic pressure ridge. Buck, B.M., et al, [1986, p.256-264, eng] 41-1029
- There are different types of ice. Berdnikov, D., [1986, p.46-47, rus] 41-1399
- Sea ice pressure ridges. Bishop, G.C., et al, [1986, p.157-184, eng] 41-1591
- Formulas for calculating sea ice volume in the Arctic Ocean. Mironov, E.U., [1986, p.69-72, rus] 41-1640
- Radar backscatter from summer and ridged sea ice, and design of short-range radars. Gogineni, S.P., [1985, 142p., eng] 41-2580
- Ice ramparts and the history of studies on them. Sasaki, T., [1986, p.215-221, jpn] 41-2605
- Hydraulic construction in ports and engineering research in coastal zones of seas. Kostiuikov, V.D., ed, [1986, 169p., rus] 41-2709
- Interaction of pressure ridges with cylindrical supports of hydraulic structures. Belov, A.B., et al, [1986, p.34-37, rus] 41-2710
- First time above the North Pole. Stromilov, N.N., [1986, 134p., rus] 41-3014
- Sea ice thickness distribution in the Arctic Ocean. Bourke, R.H., et al, [1987, p.259-280, eng] 41-3037
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al, [1987, 272p., rus] 41-3145
- Ice Island underfoot. Chilingarov, A., et al, [1986, 175p., rus] 41-3250
- Ice features and movement north of Ellesmere Island, Canada. Nordlund, O.P., et al, [1987, p.32-43, eng] 41-3371
- Sea ice ridges in the Gulf of Bothnia. Zakrzewski, W.P., [1986, p.131-144, eng] 41-3759
- Ice movement according to the FGGE buoys. Losev, S.M., et al, [1986, p.77-88, rus] 41-4199
- Amount of ice and heat required for its melting in the Far Eastern seas of the USSR. Iakunin, L.P., [1986, p.93-96, rus] 41-4201
- Ice movement in the Arctic Ocean according to the FGGE Buoys. Gorbunov, I.U.A., et al, [1986, 96-103, rus] 41-4202
- Structure-ridge interaction. Gershunov, E.M., [1987, p.85-94, eng] 41-4218
- Prevention**  
See: Countermeasures
- Primary productivity**  
See: Biomass
- Profiles**  
See: Soil profiles; Stratigraphy
- Projectile penetration**  
Compressive strength of saline ice. Blair, S.C., [1986, p.351-364, eng] 41-2665
- Small-scale projectile penetration in saline ice. Cole, D.M., et al, [1986, p.415-438, eng] 41-2668
- Some developments in shaped charge technology. Mellor, M., [1986, p.575-604, eng] 41-2678
- Some developments in shaped charge technology. Mellor, M., [1986, 29p., eng] 41-3049
- Equipment for making access holes through arctic sea ice. Mellor, M., [1986, 34p., eng] 41-3819
- Deviation of guidelines for blasting floating ice. Mellor, M., [1987, p.193-206, eng] 41-4495
- Projects**  
See: Research projects
- Propagation**  
See: Wave propagation
- Propellers**  
Naval power plants and equipment. Panin, I.U.I., ed, [1984, 153p., rus] 41-554
- Interactions of nuclear ship's propelling system with large ice floes. Basalygin, G.M., [1984, p.52-60, rus] 41-555
- Correlation of icing relationships with airfoil and rotorcraft icing data. Flemming, R.J., et al, [1986, p.737-743, eng] 41-802
- Hydrodynamic loads during ice-clogging of a propeller. Lindroos, H., et al, [1986, p.1061-1092, eng] 41-1146
- Valmet Co. program for ice testing of propeller nozzles. [1985, p.108-109, rus] 41-1523
- Snow caster having ring gear and spur gear drive means. Schlappan, W.J., [1983, 8 col., eng] 41-1984
- MV Robert LeMeur ice/propeller interaction project: full-scale data. Laskow, V., et al, [1986, p.301-319, eng] 41-2285
- Research and development looking hard at ice-going propulsion and passenger ships. [1986, p.7-8, eng] 41-2964
- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed, [1986, 120p., rus] 41-3385
- Working conditions of power transmissions of ice-navigating ships. Levin, B.M., et al, [1986, p.3-8, rus] 41-3386
- Performance of propulsion system elements in SA-15 ships in ice. Volosov, M.I., [1986, p.9-23, rus] 41-3387
- Modeling turbogear assemblies of ice-navigating ships. Basalygin, G.M., [1986, p.39-48, rus] 41-3389
- Natural rotor icing on Mount Washington, New Hampshire. Itagaki, K., et al, [1986, 62p., eng] 41-3480

Breaking the ice problem. [1986, p.48-51, 55, eng] 41-4138

**Prospecting**

See: Electromagnetic prospecting; Exploration; Seismic prospecting; Surveys

**Protection**

Enigma of avalanche protection structures. Balzaretto, P., [1986, p.38-43, ita] 41-2236

Fire protection of Arctic offshore structures. Merrick, P.E.D., [1986, p.223-237, eng] 41-2276

Fire protection engineering in modular Arctic facilities. Merrick, P.E.D., [1986, p.238-250, eng] 41-2277

See also: Countermeasures; Environmental protection; Frost protection; Slope protection; Soil stabilization

**Protective coatings**

Shields designed to counteract frost heave. Pchelintsev, A.M., [1985, p.41-42, rus] 41-294

Hydrophobic coatings for diminishing concrete deterioration and frost-heave effects. Iarkin, I.G., et al, [1985, p.49-51, rus] 41-300

Performance of bituminous surface treatments in northern Canada. MacLeod, D.R., et al, [1986, p.206-228, eng] 41-2205

Deterioration of parking garages: preventative design. Tay, D.C.K., [1985, p.228-237, eng] 41-3193

New ice repellent coating system using polymers. Ohishi, F., et al, [1987, p.9-17, jpn] 41-3754

See also: Surfactants

**Protective vegetation**

Preservation of protective forest vegetation. Pod'iachev, G.P., [1986, p.15, rus] 41-514

Influence of forestry and forest complexes on river runoff. Mishon, V.M., et al, [1986, p.71-75, rus] 41-1368

Biologic recultivation of industrial tailings in the Far North. Pereverzev, V.N., et al, [1986, 104p., rus] 41-2752

Hydrological role of the Bilimbaev forests. Mironov, B.A., [1986, p.73-88, rus] 41-2876

Revegetation of West Siberian forests. Vorob'ev, V.N., ed, [1985, 103p., rus] 41-3979

Protective forest strips in cold dry steppes. Lamin, L.A., [1985, p.79-87, rus] 41-3981

See also: Forest strips

**Pumps**

Water-source heat pumps. Phetteplace, G., [1986, p.14-15, eng] 41-408

Heat pump control/defrost circuit. Noland, J.R., [1983, 10 col., eng] 41-1983

Control and method for defrosting a heat pump outdoor heat exchanger. Saunders, J.F., et al, [1982, 14 col., eng] 41-1993

Pipeline transport in mining industry. Pokrovskaya, V.N., [1985, 13p., rus] 41-2712

Determination of surface temperature of anti-iced axial compressor inlet guide vane. Osipov, V.N., [1985, p.56-60, eng] 41-2943

**Quarries**

Calculating the amount of solar radiation heat reaching mine roads. Bazavluk, V.A., [1986, p.192-200, rus] 41-2100

Theoretical and application problems concerning air exchange in deep quarries (Summaries of reports presented at the All-Union conference held in Apatity, Sep. 23-25, 1985). Vasserman, A.D., ed, [1985, 178p., rus] 41-2769

Specifics of natural air transfer in Khibiny quarries. Ivanova, L.I., [1985, p.51-53, rus] 41-2770

Dust control on quarry roads at subzero temperatures. Loboda, A.I., et al, [1985, p.135-136, rus] 41-2771

Using supermafrost ground water in normalizing the air in the Mir pipe quarry. Prudnikov, V.K., [1985, p.144-145, rus] 41-2772

Dust control based on acoustics, centrifugal and foam-precipitation principles. Sergeev, V.S., [1985, p.152-153, rus] 41-2773

Dust control in coal quarries at subzero temperatures. Kupin, A.N., et al, [1985, p.153-154, rus] 41-2774

Blasting work in ground and rock. Kucheriavly, F.I., ed, [1986, 128p., rus] 41-2903

Using the blow-out method in open mining of placer deposits. Poplavskii, V.A., [1986, p.48-54, rus] 41-2904

Reciprocal influence of underground and open mining under permafrost conditions. Los', I.N., [1986, p.33-37, rus] 41-4553

**Quaternary deposits**

Glaciation of Nordenskiöld Land, W. Spitsbergen. Musial, A., [1985, p.497-513, eng] 41-74

Late Quaternary moraines in the Chimborazo area, Ecuador. Clapperton, C.M., et al, [1985, p.135-142, eng] 41-1225

Engineering-geological properties of Quaternary deposits in central Yakutia. Drozdov, D.S., et al, [1986, p.66-74, rus] 41-2821

Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, [1987, 144p., rus] 41-2983

Last interglacial/glacial cycle in Greenland. Funder, S., [1984, p.261-278, eng] 41-4324

Micropaleontology and sedimentology of Prudhoe Bay. McDougall, K., et al, [1986, 62p. + 14 plates, eng] 41-4600

**Radar**

Under-snow radar using multifrequency holography. Sakamoto, Y., et al, [1986, p.111-118, eng] 41-853

OTH radar measurement of sea and ice backscatter reflectivity. Ring, W.F., et al, [1982, 15p., eng] 41-1758

Advanced radar systems for support of Arctic marine operations. Mercer, J.B., et al, [1986, p.839-858, eng] 41-2061

New technique to gauge sea ice. Johnstone, B., [1987, p.653, eng] 41-2737

Midwest snow storm of 8-11 December 1977. Braham, R.R., Jr., [1983, p.253-272, eng] 41-3376

Step frequency radar for the measurement of sea ice thickness. Okamoto, K., et al, [1986, p.56-65, eng] 41-3658

Four-element CODAR beam forming. Jeans, P.K., et al, [1986, p.296-303, eng] 41-4179

Digital radar system for echo studies on ice sheets. Schultz, D.G., et al, [1987, p.206-210, eng] 41-4459

See also: Airborne radar; Side looking radar

**Radar echoes**

Echo formation in Colorado cumulus. Knight, C.A., et al, [1982, p.342-345, eng] 41-30

Snowflake aggregation near the melting layer in stratiform clouds. Newman, S.B., [1982, p.381-383, eng] 41-40

Mm wave backscatter from snow on the surface at 35 and 94 GHz. Trostel, J.M., et al, [1986, p.6.3.1-6.3.5, eng] 41-98

Radar sounding of ice on fresh-water bodies. Klemiat, K.I., et al, [1986, p.134-138, rus] 41-122

Iceberg detection by radar. Miller, J.D., et al, [1985, p.405-410, eng] 41-218

Improving the display of marine radar returns from first year sea ice. Klein, K., et al, [1986, 75p., eng] 41-244

Model studies of surface noise interference in ground-probing radar. Arcone, S.A., et al, [1985, 23p., eng] 41-447

Impulse radar sounding of level first-year sea ice from an icebreaker. Martinson, C.R., [1985, 9p., eng] 41-461

Short-pulse radar investigations of freshwater ice sheets and brash ice. Arcone, S.A., et al, [1986, 10p., eng] 41-594

Modeling the processes of radar sounding of ice covers. Timchenko, A.I., et al, [1986, p.123-126, rus] 41-704

Remote sensing of sea ice by complex radar-radiometric methods. Gavrilenko, A.S., et al, [1986, p.130-134, rus] 41-706

Errors in measuring ice thickness by airborne radar. Bogorodskii, V.V., et al, [1985, p.660-662, eng] 41-1042

Detection of small icebergs in the Arctic Ocean. Larsson, B., et al, [1986, p.358-363, eng] 41-1106

Short-time forecasting of snowfall by lidar. Shimizu, H., et al, [1986, p.2109-2114, eng] 41-1216

Radar backscatter from land, sea, rain and snow at millimeter wave length. Dyer, F.B., et al, [1985, p.250-254, eng] 41-1360

Detection of sea-ice features using K(a)-band radar. Lewis, E.O., et al, [1985, p.499-500, eng] 41-1409

Soviet glaciological studies on the eastern ice field in 1984-1985. [1986, p.10-16, rus] 41-1633

Radar backscatter from summer and ridged sea ice, and design of short-range radars. Gogineni, S.P., [1985, 142p., eng] 41-2580

Characteristics of radar echoes from sea ice. Nikitin, P.A., [1986, p.85-92, rus] 41-2719

Acoustic radar detection of icebergs in pack ice. Marko, J.R., [1987, 135p., eng] 41-3413

Sea ice distribution off Okhotsk Sea coast of Hokkaido, Jan.-Apr. 1986. Aota, M., et al, [1986, p.25-50, jpn] 41-3504

Observation of the surface roughness of sea ice using an X-band radar. Aota, M., et al, [1986, p.45-58, jpn] 41-3879

Three dimensionally scanning Doppler radar. Fujiyoshi, Y., et al, [1986, p.133-137, jpn] 41-3886

Radar observations of snowfall in 1986 over the Shinjo basin, Japan. Maki, M., et al, [1987, p.1-17, jpn] 41-4002

Frozen tailings pond dams. LaFlèche, P.T., et al, [1987, p.191-197, eng] 41-4012

Massive ground ice and geology in continuous permafrost. Dallimore, S.R., et al, [1987, p.913-918, eng] 41-4016

Hailstone shape factor and its relation to radar interpretation of hail. Knight, N.C., [1986, p.1956-1958, eng] 41-4058

Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124

Snow production in a convective cloud. Wakahama, G., et al, [1984, p.113-116, eng] 41-4379

Passive-active radar sounding of convective clouds. Bobylev, L.P., et al, [1984, p.769-772, eng] 41-4417

Interpretation of radar altimeter wave forms from Arctic ice caps. Drinkwater, M.R., et al, [1987, p.60-68, eng] 41-4436

Imaging subglacial topography by a synthetic aperture radar technique. Musil, G.J., et al, [1987, p.170-175, eng] 41-4453

- Radar altimetry delineates ice shelf boundaries and elevations. Zwally, H.J., et al, 1987, p.229-235, eng 41-4465
- Measurement of saline ice thickness using a step frequency radar. Iizuka, K., et al, 1986, 20p., eng 41-4511
- Ice hazard detection with ground wave radar. Dawe, B.J., et al, 1986, 84p., eng 41-4580
- Radar photography**
- Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al, 1986, p.3920-3924, eng 41-1361
- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, 1986, 160p., rus 41-2714
- Scientific problems and basic results of the "Kosmos-1500" experiment. Afanas'ev, I.U.A., et al, 1986, p.4-20, rus 41-2715
- Digital processing of radar images obtained from the satellite "Kosmos-1500". Aasmus, V.V., et al, 1986, p.37-57, rus 41-2716
- Methods of compiling general radar maps of polar regions. Bondina, T.V., et al, 1986, p.58-63, rus 41-2717
- Cluster analysis of airborne-radar images of ice covers. Aasmus, V.V., et al, 1986, p.64-72, rus 41-2718
- Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes. Mitnik, L.M., et al, 1986, p.93-97, rus 41-2720
- Determining some characteristics of fast and drifting ice with the meteorological radar-2 station. Komarov, A.V., et al, 1985, p.66-70, rus 41-3430
- Influence of reflections from atmospheric precipitation on the characteristics of radar images of sea ice. Aleksandrov, V.I.U., 1985, p.70-76, rus 41-3431
- Observation of sea ice using the 36-GHz surface contour radar. Fedor, L.S., et al, 1987, p.393-402, eng 41-4174
- Estimating the effect of atmospheric precipitation on sea-ice radar images. Aleksandrov, V.I.U., 1987, p.37-43, rus 41-4619
- Determining the velocity of sea-surface wind from radar data of the KOSMOS-1500 satellite. Vol'pian, G.V., et al, 1987, p.3-11, rus 41-4620
- Radar tracking**
- Analysis and simulation of altimeter performance for the production of ice sheet topographic maps. Partington, K.C., et al, 1986, p.141-145, eng 41-757
- Technique for measuring the rotational properties of falling oblate ice spheroids. Battan, L.J., 1985, p.665-666, eng 41-3217
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, 1987, p.181-184, eng 41-3280
- Giant tabular iceberg data from satellite. McIntyre, N.F., et al, 1987, p.458-462, eng 41-3677
- Radiation**
- Dynamic testing of a cryogenic heat pipe/radiator. Cenken, A.A., Jr., et al, 1978, p.105-110, eng 41-469
- Effects of radiation on the melting of a semi-transparent, semi-infinite medium. Cho, C., et al, 1978, p.373-378, eng 41-470
- Atmosphere and snow cover effects on emissive properties of ice. Pichugin, A.P., et al, 1986, p.119-123, rus 41-703
- Ion irradiations of water, sulfur dioxide and methane ices. Lanzarotti, L.J., et al, 1985, p.317-335, eng 41-1710
- Electromagnetic processes accompanying water crystallization and ice deterioration. Berri, B.L., et al, 1986, p.24-32, rus 41-2149
- See also: Gamma irradiation; Infrared radiation; Light (visible radiation); Solar radiation; Thermal radiation
- Radiation absorption**
- Twenty years of short-wave radiation observations. Marshunova, M.S., 1986, p.8-16, eng 41-3949
- Radiation balance**
- Radiation balance of Pamir slopes. Finaev, A.F., 1986, p.174-180, rus 41-130
- Sea ice distribution over the N.E. Newfoundland Shelf. Symonds, G., 1986, p.88-114, eng 41-146
- Radiation budget of a subarctic woodland canopy. Lafleur, P., et al, 1986, p.172-176, eng 41-212
- Short-wave radiation balance and heat flux in alpine soils. Kozhaev, D.A., et al, 1985, p.66-75, rus 41-1039
- Radiation regime of southern Tyumen' forests. Abdullaev, A.A., 1986, p.52-56, rus 41-2249
- Radiation and heat regime of some high-mountain biogeocoenoses. Kucherenko, V.E., 1986, p.66-86, rus 41-2880
- Study of atmospheric radiative transfer process with Arctic application. Tsay, S.-C., 1987, 266p., eng 41-3799
- Radiation measurement**
- See: Radiometry
- Radio communication**
- Systems and means of oceanic radio-communication. Panin, I.U.I., ed, 1984, 144p., rus 41-557
- Driving commander's vehicle in snow fields. Gnidyat, A., 1986, p.76-78, rus 41-3931
- Microwave propagation in the Canadian Arctic. Lam, I., 1986, 20p., eng 41-4605
- Study of sea-spray icing of communications antennas—exploratory (NSAP project Q-5-79). 1981, 43p. + appends, eng 41-4636
- Radio echo soundings**
- Refraction correction for radio echo-sounding of ice overlain by firn. Rasmussen, L.A., 1986, p.192-194, eng 41-678
- All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings. 1986, 236p., rus 41-702
- Autoregression methods of measuring ice thickness. Kalmykov, A.A., et al, 1986, p.126-130, rus 41-705
- Surface and bedrock topography of icecaps in Iceland. Björnsson, H., 1986, p.11-18, eng 41-730
- Radio-echo investigations of Ronne Ice Shelf. Crabtree, R.D., et al, 1986, p.37-41, eng 41-735
- Antarctic ice sheet topography and surface-bedrock relationships. McIntyre, N.F., 1986, p.124-128, eng 41-753
- Radio echo-sounding on Jostedalbreen, Norway. Saetang, A.C., et al, 1986, p.156-158, eng 41-760
- Multispectral digital image mapping of antarctic ice features. Swinbank, C., et al, 1986, p.159-163, eng 41-761
- Models of the Filchner-Ronne Ice Shelf thickness distributions. Lange, M.A., et al, 1986, p.10,457-10,462, eng 41-1022
- Glacier thickness and velocity measurements. Sheremet'ev, A.N., 1986, p.127-132, rus 41-1269
- Results of sounding Altai glaciers with a portable radar. Nikitin, S.A., et al, 1986, p.116-121, rus 41-1650
- Folding in the Greenland ice sheet. Whillans, I.M., et al, 1987, p.485-493, eng 41-1976
- Bed topography from radio echo soundings of Columbia Glacier, Alaska. Brown, C.S., et al, 1986, 26p., eng 41-2119
- Ice core study of antarctic climatic history. Mayewski, P.A., et al, 1985, p.71-72, eng 41-2631
- Seismic bedrock depth measurements and the origin of George VI Sound, Antarctic Peninsula. Maslanyj, M.P., 1987, p.51-65, eng 41-3811
- Flow and thickness of Riiser-Larsenisen, Antarctica. Orheim, O., et al, 1986, p.5-22, eng 41-4093
- Internal reflecting horizons in Spitsbergen glaciers. Bamber, J.L., 1987, p.5-10, eng 41-4427
- Stagnant ice at the bed of White Glacier, Axel Heiberg Island, N.W.T., Canada. Blatter, H., 1987, p.35-38, eng 41-4431
- Interface tracking in digitally recorded glaciological data. Cooper, A.P.R., 1987, p.50-54, eng 41-4434
- Seasat altimeter observations of an antarctic "lake". Cudlip, W., et al, 1987, p.55-59, eng 41-4435
- Digital radio echo-sounding and navigation recording system. Gorman, M.R., et al, 1987, p.81-84, eng 41-4440
- Radio echo soundings of sub-polar glaciers in Svalbard. Kotliakov, V.M., et al, 1987, p.151-159, eng 41-4450
- Airborne radio echo-sounding in Shirase Glacier basin. Mae, S., et al, 1987, p.160-165, eng 41-4451
- Radar sounding of fossil ice within the Kuranosuke snow patch, Japan. Yamamoto, K., et al, 1987, p.218-220, eng 41-4462
- JARE reports bottom topography and ice cores, Queen Maud Land. Yoshida, M., et al, 1987, p.221-224, eng 41-4463
- Radio waves**
- Remote sensing of nonthermal radio emission of ice covers. Kachurin, L.G., et al, 1984, p.441-448, eng 41-819
- Determination of the density and wetness of snow pack. Sihvola, A., et al, 1986, p.717-721, eng 41-851
- Arctic radio wave propagation. Taagholt, J., 1985, p.(7.1)-(7.1)12, eng 41-958
- Radio-wave attenuation in melting snow. Jain, Y.M., et al, 1985, p.68-69, eng 41-408
- Density and wetness of a snow pack. Tiuri, M., et al, 1986, p.225-230, eng 41-3901
- See also: Microwaves
- Radioactive age determination**
- Neoglacial advance of the Boundary Glacier, Banff National Park. Gardner, J.S., et al, 1985, p.1753-1755, eng 41-1240
- Dating of the Little Ice Age glacier advance, SW Norway. Matthews, J.A., et al, 1986, p.369-375, eng 41-2472
- Uranium-series dating of Allan Hills ice. Fireman, E.L., 1985, p.70-71, eng 41-2630
- Development of Holocene peat hummocks in northwestern Siberia. Vasil'chuk, I.U.K., et al, 1986, p.123-128, rus 41-2828
- Radioactive fallout**
- See: Fallout
- Radioactive isotopes**
- Tritium content in different types of ice. Romanov, V.V., et al, 1986, p.98-100, rus 41-113
- Radioactive isotope method of controlling earth density during roadbed construction. Kurochkin, V.V., 1986, p.11-12, rus 41-437
- Pb-210 measurement of snow accumulation at Mizuho Station. Masuda, N., et al, 1986, p.159-165, eng 41-1472
- Ice core record of the C-13/C-12 ratio of atmospheric CO<sub>2</sub> in the past two centuries. Friedli, H., et al, 1986, p.237-238, eng 41-1631
- Tritium content of water flowing from Yala Glacier. Kamiyama, K., et al, 1986, p.11,841-11,844, eng 41-1856
- Uranium-series dating of Allan Hills ice. Fireman, E.L., 1985, p.70-71, eng 41-2630
- Radioactive isotopes related to ice sheet accumulation and ablation. Lal, D., et al, 1987, p.4947-4952, eng 41-3343
- Radioactive cesium from the Chernobyl accident in the Greenland ice sheet. Davidson, C.I., et al, 1987, p.633-634, eng 41-4225
- Be-10 concentrations in Greenland ice. Monaghan, M.C., 1987, p.197-203, eng 41-4279
- Radioactivity**
- Transport of continental radon. Polian, G., et al, 1986, p.178-189, eng 41-1750
- Firn layer contamination by radioactive fallout. Ambach, W., et al, 1986, p.1173-1176, eng 41-4360
- Radiocarbon dating**
- See: Radioactive age determination
- Radiometry**
- Cloud liquid water in orographic storms. Rauber, R.M., et al, 1982, p.477-480, eng 41-61
- Identifying snow condition from LANDSAT MSS data. Birnie, R.V., 1986, p.845-853, eng 41-854
- Classifying sea ice with microwave imagery. Eppler, D.T., et al, 1986, p.10,661-10,695, eng 41-1008
- Large-scale short-period sea ice atmospheric interaction. Cahalan, R.F., et al, 1986, p.10,709-10,717, eng 41-1010
- Ice pack motion from AVHRR imagery. Ninnis, R.M., et al, 1986, p.10,725-10,734, eng 41-1012
- Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band. Ralzer, V.I.U., et al, 1986, p.29-42, eng 41-2307
- Detection of aircraft icing using microwave radiometers. Popa Fotino, I.A., et al, 1986, p.975-982, eng 41-2302
- Lidar-radiometric method for determining the ice water content of cirrus clouds. Zhuravleva, V.A., et al, 1986, p.32-38, eng 41-3251
- Nimbus 7 SMMR investigation of snowpack properties in the northern Great Plains for the winter of 1978-79. McFarland, M.J., et al, 1987, p.35-46, eng 41-3314
- Seasonal and regional variations of active/passive microwave signatures of sea ice. Livingstone, C.E., et al, 1987, p.159-173, eng 41-3316
- Microwave sea-ice signatures near the onset of melt. Livingstone, C.E., et al, 1987, p.174-187, eng 41-3317
- Microwave radiometer weather-correcting sea ice algorithm. Walters, J.M., et al, 1987, p.6521-6534, eng 41-3643
- Radiometric properties of snow, ice and water. Steyn-Ross, D.A., et al, 1986, p.971-980, eng 41-3992
- Ice/frost detection using millimeter wave radiometry. Final report for period 28 May 1980-31 August 1981. Gagliano, J.A., et al, 1981, 55p., eng 41-4155
- Spatial and temporal variations of supercooled water during mountain storms. Rauber, R.M., et al, 1984, p.47-50, eng 41-4371
- Problems of determining snow albedo for the High Arctic. Dubreuil, M.A., et al, 1984, p.379-386, eng 41-4535
- Rafting**
- See: Ice rafting
- Railroad equipment**
- Countermeasures against damage by heavy snowfall in Seikan Ship Bureau. Sakakibara, H., 1985, p.13-15, jpn 41-178
- Snow and ice removal from railroad switches in Europe. Takakuwa, Y., 1985, p.21-25, jpn 41-182
- Protecting searching devices of supersonic flaw-detection cars from icing. Paulus, S.V., 1986, p.121-125, rus 41-2144
- Railroad tracks**
- Countermeasures against damage by heavy snowfall in Nagano District. Tsuchiya, Y., 1985, p.9-12, jpn 41-177
- Countermeasures against damage by heavy snowfall in Seikan Ship Bureau. Sakakibara, H., 1985, p.13-15, jpn 41-178
- Countermeasures against damage by heavy snowfall in Yonago District. Takahashi, T., 1985, p.17-18, jpn 41-180
- Countermeasures against damage by heavy snowfall in Kinki Nippon railways. Fukuda, K., 1985, p.19-20, jpn 41-181
- Countermeasures against damage by snowfall on distribution facilities. Kato, I., 1985, p.29-32, jpn 41-184
- Railroad track control. Zarochentsev, G.V., ed, 1986, 145p., rus 41-2143
- Protecting searching devices of supersonic flaw-detection cars from icing. Paulus, S.V., 1986, p.121-125, rus 41-2144
- Snow removal equipment, snowplows, road cleaning machines. Teklin, V.G., 1986, 232p., rus 41-3011
- Railroad tunnels**
- Formation of loads on underground structures in thawing disperse ground. Sokolov, M., 1986, p.24-25, rus 41-3735

**Railroad tunnels (cont.)**

- Construction of the Novosibirsk subway under severe climatic conditions. Romanov, V., et al, 1986, p.7-9, rusj **41-3738**

**Railroads**

- Snow and ice removal from railroad switches in Europe. Takakuwa, Y., 1985, p.21-25, jpnj **41-182**
- Countermeasures against ice coating on trolley wires in Chiba District. Terada, S., 1985, p.37-38, jpnj **41-185**
- Countermeasures against damage by snowfall on distribution cable arrestor. 1985, p.41-43, jpnj **41-186**

- Task economic complexes in northern regions. Maslennikov, V.V., 1985, p.28-32, rusj **41-206**
- Railroad foundation freezing—hazard and prevention. Chao, Y., ed, 1984, 382p., chij **41-982**

- Physical methods of studying material used in railroad technology. Vereshchagin, I.K., ed, 1984, 135p., rusj **41-1273**

- Design of tall railroad embankments on weak bases. Vol'nov, M.V., et al, 1986, p.5-6, rusj **41-1530**

- Subway construction under severe climatic conditions. Smirnov, S.A., et al, 1986, p.15-17, rusj **41-1532**

- Alaska railroad between Anchorage and Fairbanks: guidebook to permafrost and engineering problems. Fuglestad, T.C., 1986, 82p., engj **41-1573**

- Railroad track control. Zarochentsev, G.V., ed, 1986, 145p., rusj **41-2143**

- Improving the design of railroad routes. Turbinin, I.V., ed, 1984, 106p., rusj **41-2453**

- Planning the distribution of settlements when designing railroads for little-explored regions. Bykov, I.U.A., et al, 1984, p.34-41, rusj **41-2454**

- Designing routes for complicated geological and climatic conditions in plains. Skutin, A.I., 1984, p.66-74, rusj **41-2455**

- Comparative efficiency of coal transportation by railroad and by hydraulic pipelines. Fal'netov, V.I.A., et al, 1986, p.22-24, rusj **41-2783**

- Engineering-geological evaluation of railroad construction areas. Marakhtanov, V.P., 1986, p.12-13, rusj **41-2791**

- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed, 1986, 81p., rusj **41-2916**

- Baykal-Amur line—a railroad discloses Siberia. Karger, A., 1985, p.38-48, gerj **41-3077**

- New ice repellent coating system using polymers. Ohishi, F., et al, 1987, p.9-17, jpnj **41-3754**

- Environmental impact on motor vehicle transport in the North. Belinskii, B.V., 1986, p.168-169, rusj **41-3978**

See also: Baykal Amur railroad

**Rain**

- Is sleet a contact nucleation phenomenon. Hogan, A.W., 1985, p.290-294, engj **41-1507**

- On the width and motion of a rain/snow boundary. Stewart, R.E., et al, 1987, p.343-350, engj **41-2651**

**Raindrops**

- Microphysical interpretation of radar polarization measurements. Jameson, A.R., 1984, p.791-792, engj **41-4419**

**Reclamation**

See: Land reclamation

**Reconnaissance**

See: Infrared reconnaissance

**Recording instruments**

- Vertical electrical soundings in the vicinity of extended taliks. Bol'kov, S.A., et al, 1986, p.172-180, rusj **41-2098**

**Records (extremes)**

- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). 1986, 126p., rusj **41-2213**

- Weather extremes. Schmidli, R.J., 1981, 15p., engj **41-2529**

**Recrystallization**

- Dynamic recrystallization and fabric development during the simple shear of ice. Burg, J.P., et al, 1986, p.857-870, engj **41-2809**

- Annealing recrystallization in laboratory and naturally deformed ice. Gow, A.J., et al, 1987, p.(C1)271-(C1)276, engj **41-3957**

**Recycling**

See: Sewage treatment; Waste treatment

**Reflection**

See: Seismic reflection

**Reflectivity**

- Infrared measurement of free-water content and grain size of snow. Hyvärinen, T., et al, 1987, p.342-348, engj **41-3780**

- Enhanced solar radiation along coastal Hudson Bay. Rouse, W.R., 1987, p.670-674, engj **41-4209**

- Snow and ice reflectance zones on glaciers. Hall, D.K., et al, 1987, p.104-108, engj **41-4444**

See also: Albedo; Brightness

**Reforestation**

See: Forestry; Revegetation

**Refraction**

- Measurements of refractive index spectra over snow. Andreas, E.L., 1986, p.248-260, engj **41-2984**

- Faceted snow crystals. Hallett, J., 1987, p.581-588, engj **41-3151**

- Estimating atmospheric refraction over Columbia Glacier. Rasmussen, L.A., 1986, p.61-72, engj **41-3526**

See also: Seismic refraction

**Refuse**

See: Wastes

**Regelation**

- Theory of microfracture healing in ice. Colbeck, S.C., 1986, p.89-95, engj **41-261**

- Isotopic fractionation at the base of polar and sub-polar glaciers. Boulton, G.S., et al, 1986, p.475-485, engj **41-4303**

**Reinforced concretes**

- Brittleness of reinforced concrete structures under arctic conditions. Kivekkäs, L., et al, 1986, 20p., engj **41-213**

- Piles made of steel-fiber-concrete. Tupitsyna, V.N., 1985, p.48-49, rusj **41-299**

- Reducing the amount of cement and fuel used in the production of prefabricated reinforced concrete. Dvorkin, L.I., 1985, 99p. (Pertinent p.50-69), rusj **41-650**

- Modeling of marine fiber reinforced concrete and frozen soil. Reddy, D.V., et al, 1985, p.845-856, engj **41-670**

- New compound admixture for highly frost-resistant poured concretes. Sudakov, V.B., et al, 1986, p.15-16, rusj **41-879**

- Thermosetting of winter concreting. Zubkov, V.I., et al, 1986, p.118-122, rusj **41-907**

- Development of composite members for Arctic offshore structures. Shioya, T., et al, 1986, p.660-677, engj **41-1123**

- Test cone project. Mänttinen, M., 1986, p.749-761, engj **41-1130**

- Winter concreting using heated formwork. Belvel', A.S., et al, 1986, p.28-29, rusj **41-1535**

- Properties of combined aggregate concretes of centrifuged power line supports. Shurygin, V.P., et al, 1985, p.5-11, rusj **41-1542**

- Service life of cellular concrete products. Silaenkov, E.S., 1986, 175p., rusj **41-1683**

- Calculating pile foundations for hydraulic structures. Levachev, S.N., et al, 1986, 133p., rusj **41-1747**

- Safety measures for electric-power objects of the South Yakutia Task Economic Complex. Sedalishchev, V.A., et al, 1985, p.91-99, rusj **41-1926**

- Behavior at cryogenic temperatures of steel for concrete reinforcement. Elices, M., et al, 1986, p.405-411, engj **41-2071**

- Winter concreting at the Bol'shoy Almaatinskiy Channel. Garfulin, V.M., et al, 1985, p.18-19, rusj **41-2552**

- Modeling of marine fiber reinforced concrete and frozen soil. Gopal, R.K., 1986, 155p., engj **41-2587**

- Designing moorings built of fused enlarged blocks. Goncharov, V.V., et al, 1986, p.25-26, rusj **41-2788**

- Structures of foundations designed for perennially frozen strongly deformable grounds. Kogodovskii, O.A., et al, 1986, p.29-32, rusj **41-2797**

- Using dry, low-cement concretes in permafrost areas. Zaltsman, O.M., et al, 1986, p.31-35, rusj **41-2867**

- Concrete work at the Kuzyayskaya power plant site. Bukhman, V.I., 1986, p.50-54, rusj **41-2869**

- Improvement of technology and quality control of concreting moorings in the northeastern Ob-Irtysh Basin. Poliakov, B.I., et al, 1986, p.59-68, rusj **41-2910**

- Slag-pumice concrete for industrial construction. Krichevskii, A.P., et al, 1986, 84p. (Pertinent p.70-84), rusj **41-3022**

- Reducing the amount of construction materials needed under conditions of Siberia and the Far East. Nesterov, V.V., 1986, 136p., rusj **41-3157**

- Reinforced concrete for petroleum industry structures of the Arctic Shelf. Abadzhian, K.A., 1985, p.32-33, rusj **41-3205**

- Service life of flexible elements subject to freeze-thaw cycles. Kravovskii, M.B., et al, 1986, p.19-20, rusj **41-3207**

- Building stone-earth-fill dams in the North. Kogodovskii, O.A., 1986, p.171-182, rusj **41-3460**

- Reinforcement corrosion and the use of CSF-based additives. Fidjestøl, P., 1987, p.1445-1458, engj **41-3731**

- Engineering preparations for construction of the Surgut Power Plant. Lutsuk, I.V., et al, 1987, p.14-17, rusj **41-3808**

- Repair of pavement in tunnels (using precast reinforced concrete slabs). Suda, T., et al, 1987, p.719-733, engj **41-4041**

- Rigid surfaces for roads and airports. Glushkov, G.I., et al, 1987, 255p., rusj **41-4151**

- Exposure tests at Treat Island. Smith, R.J., 1987, p.48-53, engj **41-4175**

- Erection of residential buildings, without ventilated crawl spaces, in permafrost areas. Maksimov, G.N., et al, 1983, p.77-81, rusj **41-4477**

- Research in building engineering. Structural thermodynamics. Service life of structures. Polonskii, V.P., ed, 1986, 179p., rusj **41-4500**

- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., 1986, p.122-167, rusj **41-4502**

**Relaxation (mechanics)**

- Time of snow relaxation. Runich, A.V., 1985, p.3-7, rusj **41-837**

- Determining the creep properties of ice. Ladanyi, B., et al, 1987, p.253-259, engj **41-2429**

**Relief**

See: Microrelief; Topographic features

**Remote sensing**

- Orographic layer cloud structure. Sassen, K., 1982, p.318-321, engj **41-23**

- Weddell-Scotia Sea MIZ, October 1984. Crasey, F.D., et al, 1986, p.3920-3924, engj **41-93**

- Wave propagation and remote sensing. Pre-print volume. 1986, 10 chapters, engj **41-94**

- SAR/SCAT intercomparison of microwave signatures of Arctic sea ice. Onstott, R.G., et al, 1986, p.1.7.1-1.7.3, engj **41-96**

- Remote sensing of snow-covered ice. Lin, F.C., et al, 1986, p.4.5.1-4.5.4, engj **41-97**

- Canadian East Coast Workshop on Sea Ice, 1986. 1986, 668p., engj **41-142**

- NOAA AVHRR digital data for sea ice analysis. Ramsay, B.R., et al, 1986, p.495-508, engj **41-161**

- Data on ice mechanics from remote sensing, Beaufort Sea. Gower, J.F.R., et al, 1986, p.509-522, engj **41-162**

- Sea ice concentration and ice edge position using remote sensing. Williams, D.R.P., 1986, p.526-536, engj **41-163**

- Ice conditions, Canadian east coast, using remote sensing data. Walker, A.E., 1986, p.537-545, engj **41-164**

- Sea ice drift measurements using satellite-tracking beacons. Nazarenko, D.M., et al, 1986, p.583-597, engj **41-168**

- Improving the efficiency of geochemical exploration methods in taiga (8th Session of the Siberian branch of SGPM) summaries of reports. 1986, 240p., rusj **41-197**

- Strategy of geochemical exploration in the taiga zone. Tauson, L.V., 1986, p.10-14, rusj **41-198**

- Cryospheric data management system for special sensor microwave imager DMSP data. Weaver, R., et al, 1985, p.411-415, engj **41-219**

- NORDA Arctic data collection, processing, and interpretation capabilities. Eppler, D.T., et al, 1985, 21p., engj **41-243**

- Improving the display of marine radar returns from first year sea ice. Klein, K., et al, 1986, 75p., engj **41-244**

- Marine radar for iceberg detection. Harvey, M.J., et al, 1986, 82p., engj **41-272**

- Compendium of Arctic environmental information. Welsh, J.P., et al, 1986, 142p., engj **41-483**

- Combined optical and radar methods for studying the environment. Shestopalov, V.P., et al, 1984, p.963-964, engj **41-515**

- Satellites for collecting information from automatic hydrometeorological stations. Denisov, S.I., et al, 1984, p.85-88, rusj **41-559**

- Glaciological field work and remote sensing, West Greenland. Thomsen, H.H., 1985, p.95-99, engj **41-573**

- All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings. 1986, 236p., rusj **41-702**

- Atmosphere and snow cover effects on emissive properties of ice. Pichugin, A.P., et al, 1986, p.119-123, rusj **41-703**

- Symposium on Glacier Mapping and Surveying, Reykjavik, 1985. 1986, 216p., engj **41-727**

- Evolution of the Illellewaet Glacier, Glacier National Park, B.C. Champoux, A.C., et al, 1986, p.31-33, engj **41-733**

- Seasat range measurements verified on a D-D ice sheet. Gundestrup, N.S., et al, 1986, p.69-72, engj **41-741**

- Use of LANDSAT digital data in glacier inventory. Howarth, P.J., et al, 1986, p.90-92, engj **41-745**

- Glacier mapping for an inventory of the Indus drainage basin. Kick, W.J., 1986, p.102-105, engj **41-749**

- Mapping Canada's glaciers. Ommanney, C.S.L., 1986, p.132-134, engj **41-755**

- Mapping of the margin of the inland ice, W. Greenland. Thomsen, H.H., 1986, p.164-167, engj **41-762**

- Scientific polar research in the Arctic and Antarctica. Thorén, R., 1986, 43p., engj **41-787**

- Remote sensing of nonthermal radio emission of ice covers. Kachurin, L.G., et al, 1984, p.441-448, engj **41-819**

- Errors in geological interpretation of space images. Kuzin, I.L., 1984, p.436-442, engj **41-820**

- Arctic science conference, 1986. 1986, 55p., engj **41-830**

- Remote sensing of the Bering Sea ice cover. Cavalieri, D.J., et al, 1986, p.368-377, engj **41-833**

- SAR for real-time ice reconnaissance. Nichols, A.D., et al, 1986, p.383-389, engj **41-835**



- Identifying snow condition from LANDSAT MSS data. Birnie, R.V., [1986, p.845-853, eng] 41-854
- Model of the Barnes Ice-Cap derived from Landsat MSS data. Lodwick, G.D., et al, [1985, p.1937-1944, eng] 41-868
- Swedish and Nordic polar research. Karlqvist, A., [1986, p.105-112, eng] 41-967
- World Data Center A for Glaciology: activities and services. Brennan, A.M., [1986, p.131-138, eng] 41-971
- Hydrology and land sciences from polar-orbiting satellite data. Matson, M., et al, [1985, 20p., eng] 41-976
- Ice information systems for marine operations. Leppänta, M., [1986, p.57-70, eng] 41-1090
- Satellites for industrial development in Arctic regions. Taaholt, J., [1986, p.71-82, eng] 41-1091
- Acoustic navigation in research and production situations. Hakala, H., [1986, p.145-161, eng] 41-1094
- Short-time forecasting of snowfall by lidar. Shimizu, H., et al, [1986, p.2109-2114, eng] 41-1216
- Stratifying alpine tundra for geomorphic studies. Frank, T.D., et al, [1985, p.179-187, eng] 41-1228
- Determination of the liquid water content of snow by the dye dilution technique. Grenfell, T.C., [1986, p.295-298, eng] 41-1297
- Effectiveness of thermal viewing equipment for ice surveying. Ovsiannikov, V.A., [1985, p.82-83, rus] 41-1406
- Application of NOAA/TIROS satellite data to snowmelt-runoff of Heihe Basin in Qilian Mountain. Zhang, S., et al, [1986, p.119-130, chij] 41-1459
- Eastern Snow Conference, 42nd, 1985. [1985, 303p., eng] 41-1479
- Summer 1979: ice climatology of the Canadian Arctic. Dey, B., [1985, p.25-33, eng] 41-1481
- Year-round shipping routes in the Canadian Arctic. Dey, B., [1985, p.237-242, eng] 41-1499
- Microwave remote sensing—active and passive. Ulab, F.T., et al, [1981, 2162p. (3 vols.), eng] 41-1508
- HF radar observations of Arctic pack-ice breakup. Lipa, B.J., et al, [1986, p.270-275, eng] 41-1509
- Remote sensing of icebergs by ground-wave Doppler radar. Walsh, J., et al, [1986, p.276-284, eng] 41-1510
- High-resolution electromagnetic altimetry over the ocean. Won, I.J., [1986, p.327-332, eng] 41-1511
- Ice transport through the Fram Strait. Vinje, T., et al, [1986, 39p., eng] 41-1574
- Some results and prospects for studying mass balance of glaciers (according to materials of a Hamburg seminar in 1983). Kotliakov, V.M., et al, [1986, p.179-193, rus] 41-1666
- Model for an icy halo in comets. Crifo, J.F., et al, [1985, p.429-442, eng] 41-1717
- Active and passive remote sensing of ice. Kong, J.A., [1984, 14p. + figs., eng] 41-1763
- Investigation of the use of TOVS-data in polar low research. Steffensen, M., [1986, p.119-129, eng] 41-1802
- Various condensation schemes and their impact on the simulation of polar lows. Nordeng, T.E., [1986, p.221-233, eng] 41-1807
- Polar low forecasting. Midtbo, K.H., [1986, p.257-271, eng] 41-1809
- Evaluation of SPOT HRV simulation data for Corps of Engineers applications. McKim, H.L., et al, [1985, p.61-71, eng] 41-1917
- Eastern Snow Conference, 41-st, 1984. [1984, 248p., eng] 41-1941
- Regional differences in snowpacks in the northern U.S. as seen by the Nimbus-7 SMMR. Hall, D.K., et al, [1984, p.67-74, eng] 41-1948
- Multi-year experience of remote sensing of ice thickness on the St. Lawrence River. Batson, G., et al, [1984, p.86-100, eng] 41-1950
- Independent measurement of snow water equivalent and soil moisture using gamma spectral attenuation. Vadnais, K.G., [1984, p.116-125, eng] 41-1952
- Snow survey in the Qilian Mt. basin, NW China. Liu, Z.K., et al, [1986, p.1335-1340, eng] 41-2139
- Effect of orographic shadowing on satellite imagery of snow and ice. McGuffie, K., et al, [1986, p.1359-1365, eng] 41-2140
- Wind and temperature regime on Adélie Land slopes. Kodama, Y., et al, [1986, p.6735-6741, eng] 41-2141
- Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band. Raizer, V.I.U., et al, [1986, p.29-42, eng] 41-2207
- Ice surveillance by satellite. Thompson, T., [1986, p.179-186, eng] 41-2273
- Passive microwave observations of sea ice growth. Grenfell, T.C., et al, [1986, p.826-831, eng] 41-2296
- Extracting sea ice data from satellite SAR imagery. Fly, M., et al, [1986, p.849-854, eng] 41-2299
- Snow water equivalent by satellite microwave radiometry. Hallikainen, M.T., et al, [1986, p.855-862, eng] 41-2300
- Snow wetness and sea-ice classification using SAR imagery. Eom, H.J., et al, [1986, p.937-939, eng] 41-2301
- Large-area deterministic simulation of natural runoff from snowmelt based on Landsat MSS data. Baumgartner, M.F., et al, [1986, p.1013-1017, eng] 41-2303
- Methods of forest interpretation on texture-selective images. Kravtsova, V.I., [1986, p.55-66, rus] 41-2304
- Strong fluctuation theory for moist granular media. Stogryn, A., [1985, p.78-83, eng] 41-2322
- Observing the polar regions from space. Thomas, R.H., [1984, p.165-171, eng] 41-2338
- German automatic weather stations in the Arctic 1942-1945. Selinger, F., [1986, p.89-104, eng] 41-2339
- Ten years of ice-induced vibration isolation in lighthouses. Mäkitäinen, M., [1987, p.261-266, eng] 41-2430
- Estimating ocean-air heat fluxes during cold air outbreaks by satellite. Chou, S.-H., et al, [1981, 48p., eng] 41-2527
- Snowpack properties derived from remote sensing data. Burke, H.K., et al, [1981, 85p., eng] 41-2528
- Climate simulation and change: a simple energy balance climate model. Goldenberg, S.D., [1985, 212p., eng] 41-2579
- Analytical model for assessing atmospheric effects in remote sensing. Li, S., [1986, 151p., eng] 41-2585
- Satellite derived snow cover in climate diagnostics studies. Ropelewski, C.F., [1984, p.245-248, eng] 41-2590
- Ice cover. Markham, W.E., [1986, p.101-116, eng] 41-2593
- Discrimination of different arctic snow and sea ice surfaces. Welch, J.P., et al, [1986, p.31-56, eng] 41-2654
- Electromagnetic properties of sea ice. Kovacs, A., et al, [1986, p.57-133, eng] 41-2655
- Development of low power data logger for unmanned antarctic sites. Katsuta, Y., et al, [1986, p.175-188, jpn] 41-2694
- ERS-1 radar altimeter mission. Francis, C.R., [1986, p.287-295, eng] 41-2702
- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, [1986, 160p., rus] 41-2714
- Scientific problems and basic results of the "Kosmos-1500" experiment. Afanas'ev, I.U.A., et al, [1986, p.4-20, rus] 41-2715
- Remote sensing in the study of elements of moisture supply to geosystems. Grin, A.M., ed, [1986, 113p., rus] 41-2732
- Calculating runoff formation in catchment areas from remote sensing data. Kulikov, I.U.N., et al, [1986, p.30-36, rus] 41-2734
- Water saturation and transfer in geosystems from remote sensing data. Mandych, A.F., et al, [1986, p.45-55, rus] 41-2735
- Remote sensing of heat and moisture transfer in geosystems. Kulikov, I.U.N., [1986, p.97-105, rus] 41-2736
- Variable effects on spectral response of simulated balsam fir canopies. Ranson, K.J., et al, [1986, p.649-658, eng] 41-2739
- Enhancing Landsat data acquired under very low illumination. Miller, J.M., et al, [1986, p.801-807, eng] 41-2741
- Satellite remote sensing technique for study of alpine glaciers. Della Ventura, A., et al, [1987, p.203-215, eng] 41-2763
- Remote sensing of the Fram Strait marginal ice zone. Shuchman, R.A., et al, [1987, p.429-431, eng] 41-2803
- Remote sensing as a research tool. Carsey, F.D., et al, [1986, p.1021-1098, eng] 41-3002
- Sea ice data base. Barry, R.G., [1986, p.1099-1134, eng] 41-3003
- Ice pavement detection system; Phase 1, SBIR. [1987, 125p., eng] 41-3027
- Recurring polynyas over the Cosmonaut Sea and the Maud Rise. Comiso, J.C., et al, [1987, p.2819-2833, eng] 41-3080
- Satellite monitoring of Alpine glacier fluctuations. Della Ventura, A., et al, [1985, p.150-155, ita] 41-3183
- HF (high frequency) over-the-horizon mapping of the Greenland icecap. Sales, G.S., [1983, p.(11)-1(11)12, eng] 41-3229
- Remote sensing and hydrologic models. Peck, E.L., et al, [1982, 179p., eng] 41-3256
- Nimbus-7 SMMR investigation of snowpack properties in the northern Great Plains for the winter of 1978-79. McFarland, M.J., et al, [1987, p.35-46, eng] 41-3314
- Seasonal and regional variations of active/passive microwave signatures of sea ice. Livingstone, C.E., et al, [1987, p.159-173, eng] 41-3316
- Microwave sea-ice signatures near the onset of melt. Livingstone, C.E., et al, [1987, p.174-187, eng] 41-3317
- Development of an automatic geophysical observatory. Doolittle, J.H., et al, [1985, p.229-231, eng] 41-3326
- Spaceborne SAR and sea ice: a status report. Weeks, W.F., [1983, p.113-115, eng] 41-3347
- Sea ice geophysical problems. Carsey, F.D., [1983, p.116-117, eng] 41-3348
- Ergonomic evaluation of STAR-VUE and NAV-ICE. McAvoy, G., et al, [1986, 130p. + appends., eng] 41-3365
- Scientific challenges at the poles. Welch, J.P., et al, [1987, p.23-26, eng] 41-3408
- Analysis of NavSat buoy data, Beaufort Sea, 1980—measurement variances. [1981, 31p., eng] 41-3478
- Remote sounding and interpretation of cryo-hydro-geochemical anomalies. Makarov, V.N., et al, [1986, p.133-144, rus] 41-3494
- Using satellites in mapping West Siberian forests. Gorozhankina, S.M., et al, [1986, p.34-43, rus] 41-3515
- Ground water naleds, central BAM. Defkin, B.N., et al, [1986, p.86-94, rus] 41-3520
- Satellite methods of studying naleds. Abakumenko, A.E., [1986, p.94-99, rus] 41-3521
- Microwave radiometer weather-correcting sea ice algorithm. Walters, J.M., et al, [1987, p.6521-6534, eng] 41-3643
- Step frequency radar for the measurement of sea ice thickness. Okamoto, K., et al, [1986, p.56-65, eng] 41-3658
- Investigations of active infrared detection of pavement icing. Rosen, D.I., [1987, 39p., eng] 41-3763
- Vegetation and terrain mapping in Alaska. Shasby, M., et al, [1986, p.779-786, eng] 41-3847
- Coastline changes revealed by satellite imagery. Ferrigno, J.G., et al, [1987, p.577-583, eng] 41-3856
- Comparison between Landsat cloud images and precipitation radar echoes. Endoh, T., et al, [1986, p.121-131, jpn] 41-3885
- Hydrologic applications of space technology. Johnson, A.I., ed, [1986, 488p., eng] 41-3894
- Need for improved snow-cover monitoring techniques. Rango, A., et al, [1986, p.173-179, eng] 41-3895
- Snow water equivalent from satellite data and spectrometry. Kuittinen, R., [1986, p.181-189, eng] 41-3896
- Snow cover mapping for runoff in an alpine basin. Baumgartner, M.F., et al, [1986, p.191-199, eng] 41-3897
- Remote sensing of snowpack properties by microwave radiometry. Chang, A.T.C., [1986, p.201-207, eng] 41-3898
- Snow cover mapping by microwave radiometry. Hallikainen, M., et al, [1986, p.209-214, eng] 41-3899
- Prospects of microwave remote sensing for snow hydrology. Rott, H., [1986, p.215-223, eng] 41-3900
- NRSA experience in hydrologic applications of space technology. Ramamoorthi, A.S., [1986, p.283-286, eng] 41-3903
- Forecasting snowmelt runoff of Himalayan rivers. Ramamoorthi, A.S., [1986, p.341-347, eng] 41-3904
- Satellite data input to Windy Gap computerized streamflow forecasting model. Eckhardt, J.R., et al, [1986, p.349-354, eng] 41-3905
- SNOTEL meteor burst telemetry system. Crook, A.G., [1986, p.411-418, eng] 41-3906
- Winter marginal ice zone experiment, Fram Strait/Greenland Sea, 1987/89. Davidson, K., ed, [1986, 53p., eng] 41-3930
- Summaries of the International Symposium on Remote Sensing of Environment, 18th. [1985, 251p., eng] 41-3962
- Remote sensing techniques used in solving geobotanical problems. Sharapov, V.N., ed, [1986, 191p., rus] 41-3970
- Remote sensing techniques of studying taiga after forest fires. Furin, V.V., [1986, p.147-159, rus] 41-3971
- Remote sensing techniques in studying seasonal dynamics of landscapes. Elagin, I.N., [1986, p.159-169, rus] 41-3972
- International Symposium on Remote Sensing of Environment, 19th, 1985. [1986, 1101p. (2 vols.), eng] 41-3985
- Ice sheet topography and internal characteristics, Greenland and Antarctica. Hodge, S.M., [1986, p.237-255, eng] 41-3986
- Future satellite systems for oceanic and cryospheric observations. Sherman, J.W., III, [1986, p.257-267, eng] 41-3987
- Airborne observations of terrestrial surfaces. Egan, W.G., [1986, p.501-510, eng] 41-3988
- Satellite passive microwave ice maps. Thirkettle, F.W., [1986, p.939-945, eng] 41-3989
- Computer-assisted techniques for sea ice data. Burns, B.A., et al, [1986, p.947-959, eng] 41-3990
- Nimbus-7 microwave radiometry of ocean surface winds and sea ice. Rubinstein, I.G., et al, [1986, p.961-970, eng] 41-3991
- Remotely sensed snow cover in water supply forecasting. Shafer, B.A., [1986, p.1045-1056, eng] 41-3993
- Floodplain land cover mapping using thematic mapper data. Kerber, A.G., et al, [1986, p.1057-1064, eng] 41-3994
- Snow cover mapping over the Western USA. Allen, M.W., et al, [1986, p.1065-1074, eng] 41-3995
- Ice/frost detection using millimeter wave radiometry. Final report for period 28 May 1980-31 August 1981. Gagliano, J.A., et al, [1981, 55p., eng] 41-4155
- Sea ice features using side-looking radar and Landsat imagery. Barnes, J.C., et al, [1981, 66p., eng] 41-4158
- Ice sheet altimetry in the Antarctic and Greenland. Brooks, R.L., [1981, 30p., eng] 41-4159
- Eddies in the Fram Strait marginal ice zone, 1983 and 1984. Johannessen, J.A., et al, [1987, p.6754-6772, eng] 41-4235

## Remote sensing (cont.)

- Sea ice morphology in the Fram Strait and Greenland Sea from remote sensing data. Campbell, W.J., et al, [1987, p.6805-6824, eng] **41-4239**
- Microwave sea ice signatures in the marginal ice zone. Onstott, R.G., et al, [1987, p.6825-6835, eng] **41-4240**
- Mapping mesoscale ocean structure within the interior marginal ice zone. Manley, T.O., et al, [1987, p.6837-6842, eng] **41-4241**
- Ice concentration in the marginal ice zone, Fram Strait. Burns, B.A., et al, [1987, p.6843-6856, eng] **41-4242**
- High-frequency internal wave observations in the marginal ice zone. Sandven, S., et al, [1987, p.6911-6920, eng] **41-4247**
- Observation of the planetary boundary layer in the marginal ice zone. Kellner, G., et al, [1987, p.6955-6965, eng] **41-4251**
- Spring blooming in Bering Sea during the ice edge retreat, 1980. Maynard, N.G., et al, [1987, p.7127-7139, eng] **41-4266**
- Beaufort-Chukchi ice margin data from Seasat: ice motion. Carney, F., et al, [1987, p.7163-7172, eng] **41-4268**
- Shuttle Imaging Radar B Weddell Sea ice observations. Martin, S., et al, [1987, p.7173-7179, eng] **41-4269**
- Oceanographic influences on the sea ice cover in the Sea of Okhotsk. Gratz, A.J., et al, [1981, 18p., eng] **41-4327**
- Electromagnetic property trends in sea ice, Part 1. Kovacs, A., et al, [1987, 45p., eng] **41-4368**
- Spatial and temporal variations of supercooled water during mountain storms. Rauber, R.M., et al, [1984, p.47-50, eng] **41-4371**
- Orographic cloud microphysical observations with a microwave radiometer. Sassen, K., [1984, p.801-804, eng] **41-4421**
- Bispectral method for the height determination of optically thin ice clouds. Wendling, P., et al, [1984, p.827-830, eng] **41-4422**
- Proceedings of the Second Symposium on Remote Sensing in Glaciology. [1987, 264p., eng] **41-4425**
- Texture of polar film for remote sensing. Alley, R.B., [1987, p.1-4, eng] **41-4426**
- Glaciological investigations using the synthetic aperture radar imaging system. Bindshadler, R.A., et al, [1987, p.11-19, eng] **41-4428**
- Nimbus-7 SMMR derived global snow cover parameters. Chang, A.T.C., et al, [1987, p.39-44, eng] **41-4432**
- Terrain characteristics for glacio-hydrological analysis. Clark, M.J., et al, [1987, p.45-49, eng] **41-4433**
- Pack-ice thickness from side-lapping satellite images. Feldman, U., [1987, p.69-71, eng] **41-4437**
- Pattern recognition of air photographs for estimation of snow reserves. Good, W., et al, [1987, p.76-80, eng] **41-4439**
- Morphology and kinematics of Arctic sea ice. Lee, M., et al, [1987, p.92-96, eng] **41-4442**
- Snow mapping and classification from Landsat thematic mapper data. Dozier, J., et al, [1987, p.97-103, eng] **41-4443**
- Snow and ice reflectance zones on glaciers. Hall, D.K., et al, [1987, p.104-108, eng] **41-4444**
- Sea ice variations in the Northern Hemisphere, 1974. Parkinson, C.L., et al, [1987, p.119-126, eng] **41-4446**
- Satellite remote sensing of Vatnajökull, Iceland. Williams, R.S., Jr., [1987, p.127-135, eng] **41-4447**
- Remote sensing of sea-ice growth and melt, Milne Ice Shelf, Canada. Jeffries, M.O., et al, [1987, p.145-150, eng] **41-4449**
- Interpretation and utilization of areal snow-cover data from satellites. Martinez, J., et al, [1987, p.166-169, eng] **41-4452**
- Glacier mass balance, SE Alaska and NW British Columbia. Pelto, M.S., [1987, p.189-194, eng] **41-4456**
- Snowmelt on Arctic sea ice. Scharfen, G., et al, [1987, p.200-205, eng] **41-4458**
- Use of remote-sensing data in modelling run-off from the Greenland ice sheet. Thomsen, H.H., et al, [1987, p.215-217, eng] **41-4461**
- Radar sounding of fossil ice within the Kuranosuke snow patch, Japan. Yamamoto, K., et al, [1987, p.218-220, eng] **41-4462**
- Satellite snow-cover monitoring and runoff in the Qilian Mts., China. Zeng, Q., et al, [1987, p.225-228, eng] **41-4464**
- Flow forecasts of the Indus River, Pakistan. Makhdoom, M.T.A., et al, [1986, p.171-184, eng] **41-4517**
- Wave climate study, northern coast of British Columbia. [1987, 93p., eng] **41-4530**
- Ice motion in Lake Erie. Campbell, J.E., et al, [1987, 22p., eng] **41-4577**
- Reporting**  
See: Ice reporting
- Rescue operations**
- Avalanche. Strauss, W., [1985, p.26-27, eng] **41-1838**
- Man vs. McKinley. Dixon, C., et al, [1986, p.2-8, eng] **41-1841**
- Glacier training. Hook, C., [1986, p.11, eng] **41-1842**
- Modification of sounding methods in organized search for avalanche victims. Telmon, L., [1986, p.64-69, ita] **41-2239**

## Research institutions

- See: Laboratories
- Research projects**
- Isotope research in Antarctica. Schütze, H., [1985, p.2-5, ger] **41-76**
- Overview: Arctic and offshore research. Shoemaker, H.D., [1986, p.59-62, eng] **41-366**
- Planned New Zealand antarctic activities 1986-87. [1986, 26p., eng] **41-382**
- Modifications to the 1985/86 New Zealand antarctic research program. [1986, 4 leaves, eng] **41-383**
- Reports of several international and domestic symposia. Kurida, T., et al, [1986, p.93-112, jpn] **41-443**
- Seventh continent: Antarctica in a resource age. Shapley, D., [1985, 315p., eng] **41-649**
- Scientific polar research in the Arctic and Antarctica. Thorén, R., [1986, 43p., eng] **41-787**
- General outline of the botanical investigations on Bouvetøya. Engelskjön, T., [1986, p.5-9, eng] **41-916**
- Arctic vessel research laboratory and program. Jeffrey, N.E., [1986, p.467-468, eng] **41-950**
- Implementation of the United States Arctic Research and Policy Act of 1984. Brown, J., [1986, p.155-168, eng] **41-956**
- Proceedings. [1986, 210p., eng] **41-966**
- Swedish and Nordic polar research. Karlqvist, A., [1986, p.105-112, eng] **41-967**
- Northern technical research at the University of Oulu. Ukkola, A., [1986, p.113-118, eng] **41-968**
- Research on engineering in arctic and subarctic regions, the Cold Region Technology Center of Luleå University. Lindmark, R., [1986, p.125-129, eng] **41-970**
- Recent developments at the Arctic Science and Technology Information System. Goodwin, R., [1986, p.145-148, eng] **41-972**
- Arctic Research and Policy Act of 1984 and its significance for the library and information community. Thuronyi, G.T., et al, [1986, p.183-190, eng] **41-973**
- Problem of glacier mass balance and its significance for glaciology. Kotliakov, V.M., [1986, p.4-8, 140-144, eng] **41-1046**
- USARP automatic weather station project. Stearns, C.R., [1986, p.5-12, eng] **41-1072**
- Recommendations for a U.S. ice coring program. [1986, 67p., eng] **41-1352**
- Northern Information Networking Conference. Final report. Cote, D., ed, [1986, 83p., eng] **41-1567**
- Role of Soviet academicians during WW2. Kotliakov, V.M., et al, [1986, p.19-25, rus] **41-1819**
- Science in Antarctica, Vol.9: Data compilation. [1985, 288p., jpn] **41-1918**
- Aircraft support of research in Antarctica. Bresnahan, D.M., [1986, p.473-494, eng] **41-2040**
- Determining the scope of engineering-geological research in permafrost regions. Khristalev, L.N., [1986, p.27-38, rus] **41-2083**
- National needs and Arctic research. [1986, 24p., eng] **41-2216**
- Ice research and problems of hydraulic construction in cold regions. Sparboom, U., [1984, p.1511-1513, ger] **41-2256**
- Arctic R & D—a niche for Finland. Jauho, P., [1986, p.21-24, eng] **41-2263**
- Eso—SINTEF Norwegian Arctic Research Program. Setchfield, T.L., [1986, p.167-178, eng] **41-2272**
- All-Union conference on ecology and biological productivity of the Barents Sea. Murmansk, July 1986. Summaries. [1986, 268p., rus] **41-2384**
- Botanical studies in Siberian preservation parks. Koropachinskii, I.I.U., et al, [1986, p.85-88, rus] **41-2458**
- Antarctic journal of the United States, Vol.21, No.3. [1986, 26p., eng] **41-2494**
- United States: an arctic nation. [1987, 46p., eng] **41-2566**
- Research and development in the Division of Mechanical Engineering, 1985. [1986, 89p., eng] **41-2575**
- National needs in Arctic research. Washburn, A.L., [1987, p.2-9, eng] **41-2764**
- Atlas of the polar regions. [1985, 66p., eng] **41-2884**
- Yearbook of the Norwegian Polar Research Institute, 1985. [1985, p.12-15, eng] **41-2888**
- First time above the North Pole. Stromilov, N.N., [1986, 134p., rus] **41-3014**
- Arctic offshore research in VTT structural laboratories. Juppunen, P., [1985, p.51-53, eng] **41-3085**
- Ice-scour research: long-term plan for ESFR. Livingstone, W.R., [1986, p.307-313, eng] **41-3123**
- Operation Deep Freeze 87 end of season report. [1987, Var. p., eng] **41-3164**
- Scientific challenges at the poles. Welch, J.P., et al, [1987, p.23-26, eng] **41-3408**
- Canada and polar science. Adams, W.P., et al, [1987, 116p. + appends, eng] **41-3414**
- Report of the U.S. Arctic Research Commission, 1985. [1986, 33p., eng] **41-3425**
- Antarctic science. Walton, D.W.H., ed, [1987, 280p., eng] **41-3531**
- Some current problems in geocryology. Vtiurin, B.I., et al, [1972, p.17-25, rus] **41-3746**

- Outline of the Glaciological Research Project in Patagonia, 1985-1986. Nakajima, C., [1987, p.1-6, eng] **41-3821**
- Glacioclimatological research. Aver'ianov, V.G., [1986, p.86-91, eng] **41-3952**
- Polar research. Spletstoeser, J., [1986, p.47-49, eng] **41-3955**
- Polar research. Spletstoeser, J., [1987, p.49-50, eng] **41-3956**
- SPRI 60th annual report. [1986, 26p., eng] **41-4085**
- Soviet-American field experiment "Weddell-POLEX-81". Sarukhanian, E.I., [1986, p.9-18, rus] **41-4182**
- Soviet-American expedition "Weddell-POLEX-81", review. Gordon, A.L., [1986, p.27-37, rus] **41-4184**
- United States Arctic Research Plan. [1987, 334p., eng] **41-4597**
- Discussion on topics of engineering-geological investigations of permafrost. Ershov, E.D., et al, [1987, p.120, rus] **41-4623**
- See also: Military research
- Research vessels**  
See: Oceanographic ships
- Reservoirs**
- Ice problems associated with rivers and reservoirs. Benson, C., et al, [1986, p.70-98, eng] **41-475**
- Interactions between artificial lakes and permafrost. Afanasenko, V.E., et al, [1986, p.120-127, rus] **41-2092**
- Northern lake and reservoir modeling. Gosink, J.P., [1987, p.281-300, eng] **41-3038**
- Rational utilization and preservation of ground water in the Buryat ASSR. Rezanov, I.N., ed, [1986, 114p., rus] **41-3330**
- Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR. Adushinov, A.A., [1986, p.52-59, rus] **41-3331**
- Changes in geocryological conditions of water-reservoir basins. Onikienko, T.S., [1986, p.83-88, rus] **41-3450**
- Reservoir with a submerged outlet tunnel during winter. Tvede, A.M., [1986, p.399-406, eng] **41-4518**
- Residential buildings**
- Formula for calculating frost-heave effect on pyramidal piles. Sazhin, V.S., et al, [1985, p.13-15, rus] **41-279**
- Floor surface temperature in residential buildings on slab foundations. Rudykh, O.L., et al, [1985, p.113-114, rus] **41-333**
- Transportation systems for new developments of the Far North. Vasiluk, V.A., [1986, p.74-79, rus] **41-1204**
- Basic problems of power supply in the North. Ryl'skii, V.A., et al, [1986, p.86-93, rus] **41-1205**
- Ground water level rise in Siberia and the Far North and East. Gospodinov, D.G., [1985, p.27-33, rus] **41-1363**
- Microclimate and temperature-humidity regime of building enclosures in the North. Vas'kovskii, A.P., [1986, 165p., rus] **41-1681**
- Modular construction of oil and gas industry objects. Manual. Batalin, I.U.P., ed, [1986, 576p., rus] **41-1746**
- Thermal performance of the building envelope. Tabunshchikov, I.U.A., et al, [1986, 400p., rus] **41-1749**
- Trends in the development of new mining regions. Agranat, G.A., [1986, p.14-25, rus] **41-1821**
- Bulletin of scientific-technical information. Power engineering of Southern Yakutia. Petrov, N.A., ed, [1984, 32p., rus] **41-1829**
- Solar heating systems for low-rise buildings. Il'in, M.M., [1984, p.7-9, rus] **41-1830**
- Light one-layer concrete enclosures designed for the North. Makarova, N.A., et al, [1986, p.36-37, rus] **41-1889**
- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). [1986, 126p., rus] **41-2213**
- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed, [1986, 81p., rus] **41-2916**
- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] **41-2919**
- Mobile dwellings for the North. Saprykina, N.A., [1986, 215p., rus] **41-3012**
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] **41-3013**
- Recommendations for the factory finishings of new standard house facades for northern towns. Kholopova, L.I., et al, [1986, 39p., rus] **41-3021**
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, [1986, 328p., rus] **41-3664**
- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., [1987, 208p., rus] **41-3804**
- Erection of residential buildings, without ventilated crawl spaces, in permafrost areas. Maksimov, G.N., et al, [1983, p.77-81, rus] **41-4477**
- Efficiency of producing and using lightweight concretes for construction in the Murmansk region. Nesterov, V.V., et al, [1986, p.62-67, rus] **41-4557**

**Resins**

- Reaction of loess soils with hydrofluosilicic acid and carbamide resins. Zgadzai, L.K., et al, [1986, p.53-57, rus] **41-601**
- Transmission loss at low temperature of an optical fibre. Yamakawa, S., et al, [1984, p.199-201, eng] **41-1916**
- Composites for extreme environments. [1982, 179p., eng] **41-1987**
- Thermophysical properties data on graphite/polyimide composite materials. Campbell, M.D., et al, [1982, p.54-72, eng] **41-1988**
- Behavior of graphite/polyimide composites at extreme temperatures. Garber, D.P., et al, [1982, p.73-91, eng] **41-1989**
- Composites for cryogenic dewars and instruments. Morris, E.E., [1982, p.95-109, eng] **41-1990**
- Environmental exposure of carbon/epoxy composite material systems. Givler, R.C., et al, [1982, p.137-147, eng] **41-1991**
- Challenging concept in road construction: superlight fill materials. Frydenlund, T.E., [1986, p.11-14, eng] **41-2260**
- Use of "Five-Minute Epoxy" as a cryogenic leak sealant. Martin, D.L., [1987, p.314-315, eng] **41-2469**
- Concrete strength frost-tested after 4 years and after 28 days. IAnbykh, N.N., [1986, p.36-37, rus] **41-2789**
- Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al, [1986, p.29-33, rus] **41-3767**
- Polystyrene used in pavement subjected to low temperature. MacMaster, J.B., et al, [1987, p.575-618, eng] **41-4037**

**Resources**

See: Natural resources

**Retention**

See: Snow retention; Water retention

**Revegetation**

- Environmental protection in Central Yakutia (Collection of scientific papers). Vozin, V.F., ed, [1985, 143p., rus] **41-253**
- Changes in vegetational cover induced by human factors. Nakhabsava, S.F., et al, [1985, p.3-14, rus] **41-254**
- Improving thermal regime of meadow soils. Strel'tsova, V.S., et al, [1985, p.14-26, rus] **41-255**
- Restoration and vegetation succession in circumpolar lands. [1986, 25p., eng] **41-561**
- Early results of the Rosie Creek Fire Research Project 1984. Juday, G.P., ed, [1985, 46p., eng] **41-570**
- Arctic science conference, 1986. [1986, 55p., eng] **41-830**
- Interrelations between forest and swamp in western Siberia. Glebov, F.Z., [1986, p.145-152, rus] **41-1405**
- Fir trees. Krylov, G.V., et al, [1986, 238p., rus] **41-2259**
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed, [1986, 198p., rus] **41-2373**
- Dynamics of plant communities following the felling of forest. Ziabchenko, S.S., [1986, p.5-22, rus] **41-2374**
- Soil restoration in felled areas of hillberry pine forests. Voronova, T.G., [1986, p.22-31, rus] **41-2375**
- Changes in soil microflora induced by lumbering equipment in clear-cut areas. Zagural'skaia, L.M., [1986, p.79-91, rus] **41-2377**
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilimbaev experimental forest taken as an example). Zubareva, R.S., ed, [1986, 158p., rus] **41-2873**
- Characteristics of forest resources and their use in the Bilimbaev experimental and model forest. Smolonogov, E.P., et al, [1986, p.3-15, rus] **41-2874**
- Gradual and selective cutting methods in the Bilimbaev taiga. Danilik, V.N., et al, [1986, p.89-97, rus] **41-2877**
- Artificial reforestation in the Bilimbaev taiga. Makarov, V.A., [1986, p.98-109, rus] **41-2878**
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed, [1986, 165p., rus] **41-2912**
- Natural revegetation of subpolar mountain areas affected by industry. Martynenko, V.A., [1986, p.1663-1668, rus] **41-3026**
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] **41-3433**
- Combined use of vegetational resources in the north European USSR. Chertovskoi, V.G., [1985, p.26-31, rus] **41-3434**
- Scientific-technological progress and the development of northern natural resources. Chistobaev, A.I., et al, [1985, p.42-51, rus] **41-3435**
- Recent retreat of Soler Glacier, Patagonia as seen from vegetation recovery. Sweda, T., [1987, p.119-124, eng] **41-3836**
- Human factors in the development of basic Arctic geosystems. Govorukha, L.S., [1986, p.24-30, rus] **41-3863**
- Revegetation of West Siberian forests. Vorob'ev, V.N., ed, [1985, 103p., rus] **41-3979**

- Revegetation of cleared areas in pine forests of southern Priob'e under conditions of increased human activities. Bekh, I.A., [1985, p.4-11, rus] **41-3980**
- Stability of tundra landscapes under transport loads. Zimov, S.A., et al, [1986, p.22-23, rus] **41-4063**
- See also: Introduced plants
- Rheology**
- Stability study of CRREL permafrost tunnel. Huang, S.L., et al, [1986, p.777-790, eng] **41-230**
- Compressive deformation of frozen saline soils. Kondakova, O.A., et al, [1985, p.99-100, rus] **41-324**
- Surface features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al, [1986, p.168-170, eng] **41-411**
- Elasticity and viscosity of floating, model ice-cover. Iakunin, A.E., [1986, p.124-128, rus] **41-455**
- Effect of till rheology on the flow and profile of the Laurentide ice sheet, USA. Beget, J.E., [1986, p.235-241, eng] **41-684**
- Measurements of deformation in a firm pit. Ambach, W., et al, [1985, p.211-222, ger] **41-717**
- Radio-echo investigations of Ronne Ice Shelf. Crabtree, R.D., et al, [1986, p.37-41, eng] **41-735**
- Antarctic ice sheet topography and surface-bedrock relationships. McIntyre, N.F., [1986, p.124-128, eng] **41-753**
- Time of snow relaxation. Runich, A.V., [1985, p.3-7, rus] **41-837**
- Field investigation of load-curvature characteristics of reinforced ice. Fransson, L., et al, [1986, p.175-196, eng] **41-1095**
- Site selection for structures on a floating ice shelf, Antarctica. Sharma, S.S., [1986, p.1093-1105, eng] **41-1147**
- Rheology of ice II and ice III from high-pressure extrusion. Echelmeyer, K., et al, [1986, p.693-696, eng] **41-1261**
- Glacier thickness and velocity measurements. Sheremet'ev, A.N., [1986, p.127-132, rus] **41-1269**
- Borehole deformation experiments, Barnes Ice Cap, Canada. Hooke, R.L., et al, [1986, p.261-276, eng] **41-1293**
- Design of tall railroad embankments on weak bases. Vol'nov, M.V., et al, [1986, p.5-6, rus] **41-1530**
- Evaluation of the rheological properties of columnar ridge sea ice. Brown, R.L., et al, [1986, p.55-66, eng] **41-1582**
- Rheological model for ice dynamics. Vinogradov, O., et al, [1986, p.137-146, eng] **41-1589**
- Comparison between the creep and the plastic analysis of ice forces by the FEM. Pulkkinen, E., [1986, p.421-430, eng] **41-1609**
- Numerical modelling of ice-structure interaction. Chehayeb, F.S., et al, [1986, p.431-444, eng] **41-1610**
- Deformation of till beneath ice stream B, West Antarctica. Alley, R.B., et al, [1986, p.57-59, eng] **41-1780**
- Broadening the use of ice and snow in construction. Volkovskii, K.F., [1986, p.159-162, rus] **41-2170**
- Glacio-geophysical implications of NNSS positioning at Showa Station. Shibuya, K., [1986, p.327-346, eng] **41-2212**
- Creep of soils. Pusch, R., [1979, 74p., eng] **41-2230**
- Force budget of ice sheets. Whillans, I.M., [1987, p.17-36, eng] **41-2462**
- Deformation properties of washed-up sands under permafrost conditions. Bad'ianova, L.I., [1986, p.157-165, rus] **41-2835**
- Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] **41-2962**
- Ice dynamics. Hibler, W.D., III, [1986, p.577-640, eng] **41-2995**
- Some aspects of the flow of the Ronne Ice Shelf. Doake, C.S.M., [1987, p.75-98, eng] **41-3275**
- Unconfined ice-shelf flow. Morland, L.W., [1987, p.99-116, eng] **41-3276**
- Plane and radial ice-shelf flow with prescribed temperature profile. Morland, L.W., et al, [1987, p.117-140, eng] **41-3277**
- Ice-shelf backpressure: form drag versus dynamic drag. MacAyeal, D.R., [1987, p.141-160, eng] **41-3278**
- Ice stream-ice shelf interaction in West Antarctica. Bindshadler, R.A., et al, [1987, p.161-180, eng] **41-3279**
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] **41-3280**
- Finite-element method applied to a time-dependent flowband model. Fastook, J.L., [1987, p.203-221, eng] **41-3282**
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al, [1987, p.249-285, eng] **41-3284**
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] **41-3286**
- Numerical modeling of loess structure for forecasting its sustained strength. Aniskin, V.S., et al, [1986, p.34-42, rus] **41-3394**
- Effects of free water on snow gliding. McClung, D.M., et al, [1987, p.6301-6309, eng] **41-3644**
- Sedimentary deposits in the northern lowland plains, Mars. Lucchitta, B.K., et al, [1986, p.E166-E174, eng] **41-3749**

- Flow and thickness of Riiser-Larsenisen, Antarctica. Orheim, O., et al, [1986, p.5-22, eng] **41-4093**
- Riiser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al, [1986, p.23-31, eng] **41-4094**
- Rheological properties of temperate firn. Ambach, W., et al, [1985, p.71-77, eng] **41-4130**
- Recent advance of the Ross Ice Shelf, Antarctica. Jacobs, S.S., et al, [1986, p.464-474, eng] **41-4302**
- Ridges**
- See: Pressure ridges
- Rime**
- See: Hoarfrost
- River basins**
- Hydrologic investigations in the Mimer River basin (Spitsbergen) in 1983. Gokhman, V.V., et al, [1986, p.161-166, rus] **41-127**
- River ice cover and winter drainage in the BAM zone. Sokolov, B.L., et al, [1986, p.11-33, rus] **41-422**
- Studying soils and ground in the central BAM area. Vasilenko, N.G., et al, [1986, p.104-118, rus] **41-425**
- Scheme for predicting flood runoff for unstudied rivers of Eastern Siberia. Petenkov, A.V., [1986, p.37-45, rus] **41-599**
- Estimating snow reserves, avalanches, runoff and water balance in the Kyzylchi River basin (based on aerial photography). Gapishko, V.G., [1986, p.19-23, rus] **41-699**
- Territorial concordance of long-range runoff fluctuations during vegetational periods on rivers of northern Kirgizia. Alamanov, S.K., [1984, p.63-68, rus] **41-726**
- Distribution regularities of mudflow foci in the Chechen-Ingush ASSR. Streshneva, N.P., [1985, p.46-58, rus] **41-844**
- Formulas for calculating hydrologic characteristics of East Siberian rivers. Petenkov, A.V., [1986, p.132-136, rus] **41-1371**
- Allowing for physiographic factors in estimating maximum river runoff for the swampy forest zone of Priirtysh'e. Trofimova, E.V., [1986, p.143-147, rus] **41-1372**
- Possibility of distinguishing landscape types and evaluating their hydrologic properties from space photographs. Markus, I.A.A., [1986, p.153-159, rus] **41-1373**
- Regularities governing the formation of river: water resources in Siberia. Plitkin, G.A., [1986, p.171-180, rus] **41-1374**
- Evaluating the information content of satellite data on snow line altitude for forecasting runoff of mountain rivers in the Fergana Basin. Tsarev, B.K., [1986, p.40-50, rus] **41-1685**
- Chemical element balance in the end-moraine landscapes of southern taiga. Shitikova, T.E., [1985, p.104-113, rus] **41-1818**
- Structure of the water balance of river drainage basins in the permafrost zone. Vasilenko, N.G., et al, [1986, p.326-330, eng] **41-1891**
- Calculation of maximum annual snow reserves in river basins. Galakhov, V.P., et al, [1986, p.100-105, rus] **41-1967**
- Snow water reserves in central Altai. Chubenko, A.G., [1986, p.105-111, rus] **41-1968**
- Variability of hydrological characteristics in western Siberia. Nikitin, S.P., et al, [1986, 204p., rus] **41-1969**
- Mechanics of plains rivers. Blench, T., [1986, 111p., eng] **41-2078**
- Formula for calculating runoff in the Lena River basin. Nemerinskaia, Zh.N., [1986, p.3-8, rus] **41-2648**
- Improving the map of spring-flood runoff layer of the Chukchi Peninsula rivers. Boiarintsev, E.L., [1986, p.8-17, rus] **41-2649**
- Remote sensing in the study of elements of moisture supply to geosystems. Grin, A.M., ed, [1986, 113p., rus] **41-2732**
- Modeling meltwater runoff in mountain catchment areas from satellite data. Muzylev, E.L., et al, [1986, p.16-29, rus] **41-2733**
- Development and regime of thermal erosion in the BAM zone. Poznanin, V.L., [1986, p.138-142, rus] **41-2831**
- Hydrological role of the Bilimbaev forests. Mironov, B.A., [1986, p.73-88, rus] **41-2876**
- Ground water regime and runoff in Siberian taiga. Konstantinov, V.D., [1986, p.14-22, rus] **41-3209**
- Snow cover regime of the northern and central Kazakhstan. Petropavlovskaya, M.S., [1986, p.3-22, rus] **41-3584**
- Hydrological investigations in the Mimer River basin, Svalbard, in 1983. Gokhman, V.V., et al, [1986, p.309-316, eng] **41-3622**
- Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] **41-3742**
- Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, [1986, 136p., rus] **41-3805**
- Calculation of ice volume of some mountain glaciers. Bakov, E.K., [1986, p.3-11, rus] **41-3806**
- Method of automatic calibration of the tank model (fifth report)—automatic or semi-automatic procedures to calibrate the multiplication factor of the precipitation in snowy basins. Sugawara, M., et al, [1987, p.87-113, jpn] **41-4003**

**River basins (cont.)**

- Maximum river runoff in the Angara basin. Leksakova, V.D., [1987, 132p., rus] **41-4108**  
Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed. [1985, 160p., rus] **41-4118**  
Thermal regime of upper soil layers in the Kolyma Basin. Alifimov, A.V. [1985, p.9-29, rus] **41-4119**  
Runoff in basins with variable extent of glaciation. Oerter, H., et al. [1986, p.59-64, 173-178, rus] **41-4341**  
Forecasting glacial runoff in river basins of Central Asia. Kononov, V.G., [1986, p.75-78, 187-191, rus] **41-4344**  
Variations in mountain river runoff related to climatic changes. Semenov, V.A., et al. [1986, p.78-82, 191-195, rus] **41-4345**  
Changes induced by industrial activities in the Upper Kolyma basin. Grigor'eva, N.N., et al. [1986, p.9-13, rus] **41-4467**  
Studies of natural conditions and prospects for their application. Matveev, N.P., ed. [1985, 118p., rus] **41-4560**  
Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed. [1986, 135p., rus] **41-4572**  
Development of landside processes in the lower Ob' River valley. Okhalin, S.N., et al. [1986, p.106-116, rus] **41-4574**

**See also: Watersheds****River crossings**

- Mechanized laying of communication cables under difficult conditions. Kuz'menko, V.V., et al. [1987, 161p., rus] **41-3609**  
Long river crossings of overhead power lines. Elenbogen, G.N., et al. [1987, p.2-9, rus] **41-3611**  
March under arctic conditions. Makarov, V., [1986, p.74-76, rus] **41-3932**

**See also: Bridges; Ice crossings****River deposits****See: Alluvium****River diversion**

- Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed. [1986, 135p., rus] **41-4572**  
Prospects and possible consequences of hydraulic meliorations in western Siberia. Malik, L.K., [1986, p.77-89, rus] **41-4573**

**River flow**

- Ice cover charts, upper St. Lawrence River, 1971-81. Vol. 1 (Pt. B). Shen, H.T., et al. [1982, p.249-505, eng] **41-174**  
Role of ground frost, snow cover, ice break-up and flooding in the fluvial processes of the Oulanka River, NE Finland. Koutaniemi, L., [1984, p.127-161, eng] **41-265**  
Hydrology of the Baykal Amur Railroad area. Dobroumov, B.M., ed. [1986, 135p., rus] **41-420**  
Economic development impact on river regimes in permafrost areas. Sokolov, B.L., [1986, p.3-11, rus] **41-421**  
Naleds, river ice covers and winter drainage in permafrost areas. Kravchenko, V.V., [1986, p.34-84, rus] **41-423**  
Ice and river engineering. Starosolszky, O., [1985, p.175-219, eng] **41-902**  
Unsteady flow simulation for an ice-covered river. Yapa, P.D., et al. [1986, p.1037-1049, eng] **41-1086**  
Recommendations for site-specific observations of river ice. Prowse, T.D., [1985, p.111-125, eng] **41-1489**  
On the Yukon and Tanana: river trip was "no picnic". Staley, C., [1985, p.8-9, eng] **41-1837**  
Features of the Sagavanirktok River, Alaska. Hodel, K.L., [1986, 28p., eng] **41-1895**  
Mechanics of plains rivers. Blench, T., [1986, 111p., eng] **41-2078**  
Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice. Tregub, G.A., et al. [1986, p.153-158, rus] **41-2169**  
Morphology, hydraulics and sediment transport of an ice-covered river. Lawson, D.E., et al. [1986, 37p., eng] **41-2612**  
Control of spring run-off in northern rivers: the ice veil concept. Lock, G.S.H., [1987, p.451-457, eng] **41-3676**  
River wave response to the friction-inertia balance. Ferrick, M.G., et al. [1987, p.764-769, eng] **41-4222**  
Composite resistance to flow with an ice cover. Alger, G.R., et al. [1987, p.812-817, eng] **41-4223**  
Flow forecasts of the Indus River, Pakistan. Makhdoom, M.T.A., et al. [1986, p.171-184, eng] **41-4517**  
**See also: Runoff; Stream flow**
- River ice**  
Ice cover charts, upper St. Lawrence River, 1971-81. Vol. 1 (Pt. B). Shen, H.T., et al. [1982, p.249-505, eng] **41-174**  
River and lake ice engineering. Ashton, G.D., ed. [1986, 485p., eng] **41-231**  
Determining the effectiveness of a navigable ice boom. Perham, R.E., [1985, 28p., eng] **41-446**  
Ice problems associated with rivers and reservoirs. Benson, C., et al. [1986, p.70-98, eng] **41-475**

- Field measurements under winter conditions. [1986, 323p., eng] **41-533**  
River ice conditions in Finland. Maunu, M., [1986, p.45-54, eng] **41-537**  
Numerical modeling of river ice conditions in Finland. Reiter, P.H., et al. [1986, p.305-317, eng] **41-539**  
Arctic shipping. [1986, p.17-29, eng] **41-567**  
Calculating water level variations on freezing rivers. Agaltseva, N.A., et al. [1986, p.48-51, rus] **41-700**  
Ice and river engineering. Starosolszky, O., [1985, p.175-219, eng] **41-902**  
Unsteady flow simulation for an ice-covered river. Yapa, P.D., et al. [1986, p.1037-1049, eng] **41-1086**  
There are different types of ice. Berdnikov, D., [1986, p.4C-47, rus] **41-1399**  
Hudson River ice management. Ferrick, M.G., et al. [1985, p.96-110, eng] **41-1488**  
Recommendations for site-specific observations of river ice. Prowse, T.D., [1985, p.111-125, eng] **41-1489**  
Hydrothermal decay of ice jams. Prowse, T.D., et al. [1985, p.272-276, eng] **41-1504**  
Soviet glaciological studies in 1985. Kotliakov, V.M., et al. [1986, p.3-10, rus] **41-1632**  
Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al. [1986, p.199-228, rus] **41-1668**  
St. Lawrence River hanging ice dams, winter 1983-1984. Shen, H.T., et al. [1984, 85p., eng] **41-1669**  
Multi-year experience of remote sensing of ice thickness on the St. Lawrence River. Batson, G., et al. [1984, p.86-100, eng] **41-1950**  
Record St. Clair River ice jam of 1984. Derecki, J.A., et al. [1986, p.1182-1194, eng] **41-2114**  
River ice jams: theory, case studies, and applications. Gerard, R., [1987, p.241-255, eng] **41-2243**  
Forecasting the freezeup date of the Danube River. Shcherbak, A.V., [1986, p.155-160, rus] **41-2636**  
Ice regimes of the lower Mackenzie River and Mackenzie Delta. Terroux, A.C.D., et al. [1981, 64p. + append., eng] **41-2727**  
Improving the efficiency of petroleum transportation by river. Zhivotkevich, N.I., ed. [1986, 96p., rus] **41-2914**  
Transportation of petroleum products during the extended and winter navigation seasons. Levanov, B.I., [1986, p.61-66, rus] **41-2915**  
Hydraulics of river ice. Shen, H.T., [1985, 78p., eng] **41-2935**  
Determination of crack resistance of freshwater ice. Danilenko, V.I., [1985, p.131-136, eng] **41-2972**  
Corps of engineers seek ice solutions. Frankenstein, G.E., [1987, p.5-7, eng] **41-3140**  
Ice engineering for rivers and lakes bibliography. Wortley, C.A., [1987, 117p., eng] **41-3223**  
Water resources of the Yakut ASSR and their use. Nogovitsyn, D.D., [1985, 124p., rus] **41-3432**  
Oil slicks in ice covered rivers. Berry, B.A., et al. [1985, p.369-379, eng] **41-3471**  
Riverbank erosion in the Colville Delta, Alaska. Walker, J., et al. [1987, p.61-70, eng] **41-3555**  
Niagara River ice boom: effects on environment. Rumer, R.R., Jr., et al. [1983, p.105-116, eng] **41-3573**  
Ice thickness data, winter 1980-1981. [1987, 50p., eng] **41-3812**  
Breakup of small rivers in the Subarctic. Woo, M.-K., et al. [1987, p.784-795, eng] **41-4081**  
Water temperature and heat flux at the base of river ice covers. Marsh, P., et al. [1987, p.33-50, eng] **41-4214**  
Mathematical model for river ice. Shen, H.T., et al. [1987, p.141-146, eng] **41-4221**
- Rivers**  
Chlorides in the Don River watershed resulting from road de-icing salt. Paine, R.L., [1979, 23p., eng] **41-234**  
Jamming of taiga rivers by fallen trees. Zemtsov, A.A., et al. [1986, p.101-107, rus] **41-813**  
Dissolved-oxygen depressions under ice cover in two Yukon rivers. Whitfield, P.H., et al. [1986, p.1675-1679, eng] **41-1863**  
New aquatic tundra plants. Vekhov, N.V., et al. [1986, p.1619-1620, rus] **41-3024**  
Construction of deep foundations. Glotov, N.M., et al. [1985, 248p., rus] **41-3125**  
Differentiations of seasonally and perennially frozen rocks in Severnoe Priamur'e. Pozdnakov, I.V., [1986, p.96-106, rus] **41-3490**  
Hydrologic calculations for economic development of the BAM zone. Evstigneev, V.M., et al. [1986, p.156, rus] **41-3983**  
**See also: Glacial rivers; Icebound rivers; Streams**
- Road icing**  
Effects of road salt upon stream invertebrates. Kersey, K., [1979, 12p. + append., eng] **41-232**  
Physics of snow and ice control on roads and highways. Hanley, K., [1979, 15p., eng] **41-233**  
Weather forecasting—a tool for winter snow and ice control on roads. List, C., [1979, 20p., eng] **41-235**  
Role of salt in snow and ice control in Ontario. McBride, N., et al. [1979, 68p., eng] **41-236**  
Ontario municipal experiments to reduce the use of road salt. Fabricius, T., et al. [1980, 95p., eng] **41-238**

- Effects of road de-icing salt on stream invertebrates. Kersey, K., [1981, 21p., eng] **41-240**  
Performance of two ice-retardant overlays. Tanski, J.H., [1986, 42p., eng] **41-248**  
De-icing chemicals used in North America and overseas. Keyser, J.H., [1978, p.5-13, eng] **41-379**  
Winter Service Congress, 1985. [1985, 68p., ger] **41-384**  
Winter service on main-street network in Slovenia. Ocvirk, R., [1985, p.31-35, ger] **41-387**  
Winter service on the municipal highways. Sauer, A., [1985, p.37-40, ger] **41-388**  
Optimization of the winter service in Rheinland-Pfalz. Rude, B.J., [1985, p.41-46, ger] **41-389**  
Development and use of a new melting agent. Washüttl, J., [1985, p.49-57, ger] **41-390**  
Net craning-up method for snow removal. Muramatsu, K., [1986, p.83-85, jpn] **41-441**  
Antilock brake systems in winter driving, Sweden and Norway. Nordström, O., [1986, 46p. + append., swe] **41-572**  
Potential for use of natural brines in highway applications. Sack, W.A., et al. [1985, p.1-8, eng] **41-654**  
Calcium magnesium acetate research in Washington State. Ernst, D.D., et al. [1985, p.8-12, eng] **41-655**  
State-of-the-art of ground aircraft deicing technology. Mayer, D., [1986, 13p., eng] **41-1354**  
On fracture mechanics in lifting an ice sheet. Liu, C.H., et al. [1985, p.189-197, eng] **41-1359**  
Use of a computer model to predict the formation of ice on road surfaces. Parmenter, B.S., et al. [1986, 19p., eng] **41-1412**  
Effect of salt application on roadway safety and mobility. Jones, P.H., et al. [1986, 90p., eng] **41-1413**  
Ice detection and weather information systems. [1985, 127p., eng] **41-1414**  
Deicing/anti-icing fluid—runways and taxiways. [1980, 8p., eng] **41-1757**  
Urea compound, powder. [1979, 7p., eng] **41-1760**  
Official specifications for ice roads and actual bearing capacity. Palosuo, E., [1984, p.18-19, fin] **41-1937**  
Chemistry of deicing roads: breaking the bond between ice and road. Trost, S.E., et al. [1987, p.15-26, eng] **41-2068**  
Passenger car tests of antilock systems under winter conditions. Nordström, O., [1986, 37p. + append., swe] **41-2218**  
Water pollution from roadways. Lygren, E., et al. [1985, 46p., nor] **41-2295**  
Focus on snow and ice control. [1986, p.30-31, eng] **41-2310**  
Modeling the road icing process. Vorotnikov, V.I., et al. [1986, p.77-78, rus] **41-2383**  
Traffic safety, service quality and road maintenance. Rudolfsson, A., [1986, p.49-77, eng] **41-2488**  
Susceptibility to icing on road pavements. Gustafson, K., [1986, 73p. + append., swe] **41-2567**  
Test results: performance of two ice-retardant overlays. [1986, p.30-33, eng] **41-2696**  
Ice pavement detection system; Phase 1, SBIR. [1987, 125p., eng] **41-3027**  
Optimum sand specifications for roadway ice control. Final report. Connor, B., et al. [1982, 36p., eng] **41-3047**  
Ice detection systems—experimental feature. Final report. Petrak, A., et al. [1986, 11p. + append., eng] **41-3510**  
Resistance of concrete pavements to frost, and chemical deicing agents. Plähn, J., et al. [1987, p.87-92, ger] **41-3547**  
Investigations of active infrared detection of pavement icing. Rosen, D.I., [1987, 39p., eng] **41-3763**  
Operation of technical equipment in freezing weather. Voloshnikov, D., et al. [1987, p.78-80, rus] **41-3933**  
Hot sand for improved traction on icy roads. Reckard, M.K., [1985, 7p., eng] **41-4000**  
Application of hot sand for winter ice control—laboratory phase. Hayhoe, G.F., [1984, 33p. + append., eng] **41-4073**  
Ice and fog: detection and warning systems. December 1985-November 1986 (citations from the NTIS database). [1986, 33p., eng] **41-4128**  
Ice prediction package cuts costs on Cheshire's gritting operation. [1987, p.20-22, eng] **41-4331**  
Rubber-modified pavements for ice control in Alaska. Paulson, A., [1987, 2p., eng] **41-4578**  
Heat pipes to avoid freezing of highway bridge decks. Ferrara, A.A., et al. [1977, 5p., eng] **41-4604**  
Benefits and costs in the use of salt to deice highways. Brenner, R., et al. [1976, 140p., eng] **41-4606**
- Road maintenance**  
Economic impact of roadblocks during thaw periods of the 1984-85 winter. Bouzigues, J.B., et al. [1986, p.51-59, fre] **41-172**  
Ontario municipal experiments to reduce the use of road salt. Fabricius, T., et al. [1980, 95p., eng] **41-238**  
Application rates of salt on highways and sidewalks. Auamache, M., et al. [1980, 51p., eng] **41-239**  
Winter maintenance practice and research in Ontario. Fromm, H.J., [1978, p.1-4, eng] **41-378**  
Winter Service Congress, 1985. [1985, 68p., ger] **41-384**



- Ecological factors in the winter service. Dedić, O., [1985, p.11-16, ger] 41-385
- Winter service in Steiermark, Austria. Dirnböck, G., [1985, p.17-21, ger] 41-386
- Winter service on main-street network in Slovenia. Ocvirk, R., [1985, p.31-35, ger] 41-387
- Winter service on the municipal highways. Sauer, A., [1985, p.37-40, ger] 41-388
- Potential for use of natural brines in highway applications. Sack, W.A., et al, [1985, p.1-8, eng] 41-654
- Calcium magnesium acetate research in Washington State. Ernst, D.D., et al, [1985, p.8-12, eng] 41-655
- Staffing of maintenance crews during winter months. Riessel, M.C., et al, [1985, p.12-21, eng] 41-656
- Levels of services in winter road maintenance. Charpentier, G., et al, [1986, p.30-33, ita] 41-866
- Snow deflector built at the edge of a road cut. Anno, Y., [1986, p.121-129, eng] 41-1283
- Effects of cold environment on rapid runway repairs. Abele, G., [1986, p.1-9, eng] 41-1355
- Ice-inhibiting additives in road surfacing. Johannes, H., [1981, p.207-219, ger] 41-1548
- Expansion joint snowplow deflector. Puccio, G.S., [1983, 4 col., eng] 41-1772
- Method of preparing snow and ice control compositions. Stockel, R.F., [1983, 6 col., eng] 41-1776
- Snow research started. Palosuo, E., et al, [1983, p.59-60, fin] 41-1933
- Maintenance measures and road safety. Roine, M., et al, [1983, p.262-266, fin] 41-1934
- Winter maintenance of roads with heavy traffic, Italy. Maggiorotti, P., [1986, p.48-56, ita] 41-2231
- Winter maintenance of urban roads with high traffic performance. Baiano, G., [1986, p.57-61, ita] 41-2232
- Winter maintenance of roads. Popp, C., [1986, p.536-540, ger] 41-2324
- Introduction to the International Winter Road Congress, 1986. Suonio, V., [1986, p.32-34, eng] 41-2486
- Winter serviceability in PIARC member countries. Lannoy, H. de, [1986, p.35-48, eng] 41-2487
- Traffic safety, service quality and road maintenance. Rudolfsson, A., [1986, p.49-77, eng] 41-2488
- Electronic monitoring and telematics for traffic protection along state roads. Ortolani, E., [1987, p.16-19, ita] 41-3307
- Winter maintenance of highways. Lazzarotti, G., [1987, p.20-22, ita] 41-3308
- Present situation and evaluation of *in-situ* surface and base recycling. Tada, H., et al, [1987, p.773-811, eng] 41-4043
- Recycling of pavement *in-situ* in Japan. Kohno, H., et al, [1987, p.867-892, eng] 41-4046
- In-place surface recycling on expressways. Tsuchiya, K., et al, [1987, p.893-915, eng] 41-4047
- New development in Japan's pavement management process. Enomoto, M., et al, [1987, p.917-948, eng] 41-4048
- Measurement and maintenance of runway friction at Canadian airfields. Argue, G.H., et al, [1987, p.949-979, eng] 41-4049
- Corrosive deicing chemicals and winter road maintenance. Nottingham, D., et al, [1983, 35p., eng] 41-4607
- Roadbeds**
- Radioactive isotope method of controlling earth density during roadbed construction. Kurochkin, V.V., [1986, p.11-12, rus] 41-437
- Waterproofing interlayers for the improvement of water- and thermal regime of roadbeds. Ruvinskii, V.I., et al, [1985, p.23-24, rus] 41-502
- Aerodynamics of road embankments (a discussion). Ivanov, V.D., [1985, p.25-26, rus] 41-503
- Embankments built of water-logged earth with horizontal sand-drains. Vasil'ev, I.U.M., [1985, p.2-3, rus] 41-505
- Foundations built of dry cemented earth mixtures. Kosenko, A.A., [1985, p.4-5, rus] 41-506
- Strength and filtration properties of water-saturated peats in a detonation zone. Smirnov, A.G., et al, [1986, p.115-118, rus] 41-906
- Sodium nitrite water solutions used in the construction of roadbeds for forest roads. Miglachenko, V.P., [1986, p.100-103, rus] 41-1397
- Polystyrene foam used in construction of road and airport pavements. Ivanov, V.N., [1986, p.14-16, rus] 41-1882
- Formulas for calculating deformation modulus of frozen ground. Slashchilin, O.A., [1984, p.8-9, rus] 41-1883
- Calculating the amount of solar radiation heat reaching mine roads. Bazavluk, V.A., [1986, p.192-200, rus] 41-2100
- Structural heat-engineering for road pavements. Mikhailov, A.V., et al, [1986, 14p., rus] 41-2210
- Setting standards for water-resistance properties of road pavement materials for Siberian conditions. Shabanov, V.M., [1986, p.106-110, rus] 41-2758
- Automated highway design. Fedotov, G.A., [1986, 317p., rus] 41-2861
- Studies on frost resistance of ash and ash-slag materials for use in foundations—the case of the Barabinskaya State Regional Electric Power Plant. Golli, O.R., [1985, p.52-56, rus] 41-3127
- Roads**
- Prevention of naled formation on Kirghizian mountain roads. Turgunbaev, A.T., [1985, p.26-27, rus] 41-504
- Preservation of protective forest vegetation. Pod'iachev, G.P., [1986, p.15, rus] 41-514
- Stabilization of fine-grained soil for road and airfield construction. Danyluk, L.S., [1986, 37p., eng] 41-540
- Snow avalanche atlas, Seward Highway, south-central Alaska. March, G.D., et al, [1982, 168p., eng] 41-560
- Effects of freeze thaw cycles on granular soils for pavements. Cole, D., et al, [1986, 70p., eng] 41-593
- Winter highway construction. Bennett, F.L., [1986, p.32-46, eng] 41-642
- Scientific and technical progress in road construction. Aitmatov, I.T., ed, [1984, 188p., rus] 41-785
- Soil-aggregate-fabric systems in frost susceptible roads. Hoover, J.M., et al, [1981, p.6-14, eng] 41-1038
- Transportation in northern regions. Derbyshev, A.S., [1986, p.60-63, rus] 41-1203
- Transportation systems for new developments of the Far North. Vasiluk, V.A., [1986, p.74-79, rus] 41-1204
- Theoretical basis for planning northern cities. Panov, L.K., [1986, p.146-154, rus] 41-1206
- Discussion on crevasse in frozen earth. Pang, G., [1986, p.287-290, chi] 41-1432
- Road construction in Western Siberia. Segerkrantz, V., [1984, p.408-411, fin] 41-1939
- Ecological values along the North Slope portion of the Haul Road. Underwood, L.S., et al, [1978, 40p., eng] 41-2076
- Calculating the amount of solar radiation heat reaching mine roads. Bazavluk, V.A., [1986, p.192-200, rus] 41-2100
- Process of hard snow formation on East Siberian roads. Maevskii, A.A., [1986, p.87-92, rus] 41-2160
- Effective sectional road pavements for northern regions and Siberia. Karpov, B.N., et al, [1986, 96p., rus] 41-2211
- Challenging concept in road construction: superlight fill materials. Frydenlund, T.E., [1986, p.11-14, eng] 41-2260
- Frost insulation in rock tunnels. Pedersen, K.B., et al, [1986, p.15-18, eng] 41-2261
- Flexible culverts in snow avalanche protection for roads. Ostlid, H., [1986, p.19-21, eng] 41-2262
- All-Union tutorial seminar on mathematical modeling in science and technology. Summaries. [1986, 333p., rus] 41-2381
- Designing routes for complicated geological and climatic conditions in plains. Skutin, A.I., [1984, p.66-74, rus] 41-2455
- Setting standards for water-resistance properties of road pavement materials for Siberian conditions. Shabanov, V.M., [1986, p.106-110, rus] 41-2758
- Dust control on quarry roads at subzero temperatures. Loboda, A.I., et al, [1985, p.135-136, rus] 41-2771
- Automated highway design. Fedotov, G.A., [1986, 317p., rus] 41-2861
- Road design, allowing for climatic impact on traffic conditions. Vasil'ev, A.P., [1986, 248p., rus] 41-2894
- Symposium on Unbound Aggregates in Roads, 1981. [1981, 207p., eng] 41-2923
- Granular base and sub-base materials. Hill, J., [1981, p.33-38, eng] 41-2924
- Frost susceptibility tests and their application. Jones, R.H., [1981, p.45-50, eng] 41-2925
- Research at TRRL on the frost-susceptibility of roadmaking materials. Sherwood, P.T., [1981, p.151-160, eng] 41-2928
- Winter air temperatures in relation to frost damage in roads. Sherwood, P.T., et al, [1986, 15p., eng] 41-2934
- Snow removal equipment, snowplows, road cleaning machines. Tekin, V.G., [1986, 232p., rus] 41-3011
- Performance of bituminous surface treatments in Alaska. Final report. Connor, B., [1981, 61p., eng] 41-3046
- Evaluation of road construction by surcharge over muskeg. Johnson, E.G., [1982, 13p. + append., eng] 41-3048
- Frost action on roads and airfields. Johnson, T.C., et al, [1986, 45p., eng] 41-3143
- Urban planning and construction problems in Siberia. Krushlinskii, V.I., [1986, p.40-45, rus] 41-3259
- Structural basis of snow-retention efficiency of forest strips. Kolomiets, V.A., [1986, p.94-97, rus] 41-3261
- Frost action on transportation facilities. Chisholm, R.A., [1983, 57p., eng] 41-3497
- Corrosion protection of the concrete components of bridges. Manning, D., [1987, p.1527-1547, eng] 41-3732
- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., [1987, 208p., rus] 41-3804
- Environmental impact on motor vehicle transport in the North. Belinskii, B.V., [1986, p.168-169, rus] 41-3978
- Rigid surfaces for roads and airports. Glushkov, G.I., et al, [1987, 255p., rus] 41-4151
- Winter roads in the Arkhangel'sk forests. Iakovenko, I.U.G., [1987, p.40-45, rus] 41-4172
- Experimental study on prevention of differential frost heave by using Geogrid. Oayama, K., et al, [1985, p.179-186, jpn] 41-4586
- See also: Ice roads; Snow roads
- Rock creep**
- See: Talus
- Rock excavation**
- Problems of ecology and environmental protection (Collections of papers of the First Republican Conference), Vol.1. [1983, 292p., rus] 41-519
- Underground storage of petroleum products in the Far North. Braiko, V.N., et al, [1983, p.107-109, rus] 41-520
- Hydropneumatic hammers of EO-2621 excavators for frozen ground. Karnaukhov, A.V., et al, [1978, p.74-78, rus] 41-1325
- Earthwork organization for construction of Kureyskaya power plant dams. Baliasnikov, G.G., et al, [1986, p.45-49, rus] 41-2868
- Physico-chemical processes of mining. Mathematical models of leaching ores and thawing frozen rocks. Ignatov, A.A., [1986, 97p., rus] 41-3015
- Rock failure under thermo-cyclic loads. Moskalov, A.N., et al, [1987, 248p., rus] 41-4152
- Slit- and borehole charges for permafrost excavation. Iurko, A.A., [1987, p.18-19, rus] 41-4625
- Rock fills**
- Experience and prospects for using seasonally freezing grounds as foundations. Orlov, V.O., et al, [1985, p.3-11, rus] 41-277
- Foundation construction in complex engineering-geological conditions in Finland. Kushnir, I.N., et al, [1985, p.42-43, rus] 41-295
- Compaction of clastic-clayey grounds below building foundations on fills. Aminova, L.I., [1985, p.87-89, rus] 41-318
- Examples of dam construction in Siberia and the Far North. Kolmogorov, R.I., [1973, p.53-62, rus] 41-1276
- Design and construction of the socle part of the Kureyskaya channel dam. Makarov, V.A., et al, [1986, p.27-31, rus] 41-2866
- Geomechanical studies of power supply structure foundations. Sapagin, D.D., ed, [1985, 120p., rus] 41-3126
- Determining heat conductivity coefficients of coarse grained materials used in embankment construction. Gorokhov, E.N., [1985, p.105-110, rus] 41-3130
- Influence of temperature regime and ice content on deformation of embankments built of coarse-clastic soils. Gavrilov, A.N., [1986, p.44-53, rus] 41-3445
- Forecasting temperature and moisture regime of rock-earth fill dams. Bogoslovskii, P.A., et al, [1986, p.89-96, rus] 41-3451
- Experimental investigations of heat-mass transfer coefficients in macroporous media. Mukhetdinov, N.A., [1986, p.119-127, rus] 41-3455
- Rock glaciers**
- Runoff from rock glaciers in the southern Alps of France. Evim, M., [1984, p.27-40, fre] 41-623
- Glacier mapping of rock glaciers, moraines and buried ice. Whalley, W.B., et al, [1986, p.181-183, eng] 41-766
- Arapaho rock glacier, Front Range, Colorado, U.S.A.: a 25-year resurvey. Benedict, J.B., et al, [1986, p.349-352, eng] 41-1182
- Statistical interpretation of the fabric of a rock glacier. Giardino, J.R., et al, [1985, p.165-177, eng] 41-1227
- Tree-ring analysis of movement of a rock glacier, Mount Mestas, CO. Giardino, J.R., et al, [1984, p.299-309, eng] 41-1232
- Soviet glaciological studies in 1985. Kotliakov, V.M., et al, [1986, p.3-10, rus] 41-1632
- Dating slope deposits and estimating rates of rock wall retreat in Northwest Spitsbergen by lichenometry. André, M.F., [1986, p.65-75, eng] 41-1846
- Zonation and ecology of high mountain permafrost in scandinavia. King, L., [1986, p.131-139, eng] 41-1871
- Cryolithozone of central Asia. Gorbunov, A.P., [1986, 57p., rus] 41-2349
- Rock glaciers. Gorbunov, A.P., et al, [1986, p.73-77, rus] 41-2535
- Rock glaciers of the Dzhetim-Bel Range, Central Tien Shan. Tarakanov, A.G., [1987, p.63-67, rus] 41-3081
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481
- Peculiarities of mapping rock glaciers. Gorbunov, A.P., et al, [1986, p.5-22, rus] 41-3482
- Significance of rock glaciers in the formation and development of lakes in the Tien Shan highlands. Tarakanov, A.G., [1985, p.137-145, rus] 41-3871
- Rock glaciers in the dry Andes. Libouty, L., [1986, p.18-25, 139-144, rus] 41-4334

**Rock glaciers (cont.)**

- Signs of "semiarid" pediplanation on Mars. Polosukhin, V.P., [1987, p.79-85, rus] 41-4497

**Rock mechanics**

- Peculiarities of rock pressure development in mining excavations when the roof is a difficultly caving permafrost. Popov, S.F., [1985, p.93-97, rus] 41-195
- Snow and avalanche research at the University of Innsbruck. Lackinger, B., [1984, p.155-173, ger] 41-711

- Effect of humidity and temperature on rocks in cold climates. Fahy, B.D., et al. [1984, p.291-298, eng] 41-1231

- Alpine debris fans in the Canadian Rocky Mountains. Sauchyn, D.J., [1986, p.191-217, eng] 41-1255

- Protalus rampart related to alpine flows in Japanese Alps. Ono, Y., et al. [1986, p.213-223, eng] 41-1880

- Criteria for scaling rock and avalanche defense structures. Menegus, F., et al. [1986, 146p., ita] 41-2568

- Weathering effects: slopes in mudrocks and over-consolidated clays. Taylor, R.K., et al. [1987, p.405-445, eng] 41-3044

- Verification tests for a stiff inclusion stress sensor. Cox, G.F.N., et al. [1987, p.81-88, eng] 41-3301

- Evaluating slope stability at different temperature regimes. Ukhov, S.B., et al. [1986, p.106-113, rus] 41-3453

- Testing carbamide resins in the -40 to +50 temperature range. Kondratov, A.B., et al. [1986, p.29-33, rus] 41-3767

- Rock avalanche from the peak of Mount Meager, British Columbia. Evans, S.G., [1987, p.929-933, eng] 41-4017

- Rock streams

- Development of cryogenic processes in the central Transbaikalia. Shesternov, D.M., et al. [1985, p.74-76, rus] 41-3111

- Mountain collapse and rock sliding from Mount Saint Helens. Kronfeiler-Kraus, G., [1985, p.227-232, ger] 41-719

- Rock avalanches in Huascarán Mountain, Peru. Körner, H., [1985, p.233-247, ger] 41-720

- Methods of studying rock streams by repeated photostereodolite surveys. Shevchenko, B.F., [1986, p.130-134, rus] 41-1201

- Rock glaciers. Gorbunov, A.P., et al. [1986, p.73-77, rus] 41-2535

- Soil cover of the Bilimbaev model forest. Firsova, V.P., et al. [1986, p.45-72, rus] 41-2875

- Engineering geology in construction. Ziangirov, R.S., et al. [1986, 175p., rus] 41-2889

- Morphology and lithogenesis of rock streams. Gorbunov, S.M., [1986, 120p., rus] 41-2901

- Rock glaciers of the Dzhetim-Bel Range, Central Tien Shan. Tarakanov, A.G., [1987, p.63-67, rus] 41-3081

- New information on rock streams. Shvetsov, P.F., et al. [1983, p.103-105, rus] 41-4485

- Rock temperature

- See: Frozen rock temperature

- Rocks

- Microstructure and the resistance of rock to tensile fracture. Peck, L., et al. [1985, p.11533-11546, eng] 41-496

- Rock moisture content and frost weathering. McGreevy, J.P., et al. [1985, p.337-346, eng] 41-1252

- Condensing steam tunnel heat sinks. Lunardini, V.J., [1986, 29p., eng] 41-1350

- Relationship between salt weathering debris production and temperature. Davison, A.P., [1986, p.335-341, eng] 41-1778

- Dating exposed rock surfaces in the Arctic by lichenometry. Innes, J.L., [1986, p.253-259, eng] 41-1869

- Project of an inhabited lunar base. Shevchenko, V.V., [1986, p.85-98, rus] 41-2308

- Freeze thaw simulations on quartz-micaschist on Signy Island. Hall, K., [1986, p.19-30, eng] 41-2359

- Occurrence of boulders of stromatolitic dolomite along St. Lawrence Estuary. Dionne, J.C., [1986, p.93-98, fre] 41-2708

- See also: Frozen rocks; Limestone; Lithology

- Rocks

- Simulating snow loads on fabric roofs. Petersen, R.L., [1986, p.894-901, eng] 41-1100

- Proposed code provisions for drifted snow loads. O'Rourke, M., et al. [1986, p.2080-2092, eng] 41-405

- Dynamic thermal performance of insulated metal deck roof systems. Courville, G.E., et al. [1986, p.53-63, eng] 41-1379

- Snow control for sloped glazing—an energy penalty. Schuyler, G.D., et al. [1986, p.443-448, eng] 41-1382

- Protected membrane flat roofs. Christensen, G., [1986, p.974-984, eng] 41-1390

- Analysis of snow loads due to drifting on multilevel roofs. Speck, R.S., Jr., [1985, p.157-170, eng] 41-1492

- Snow loads on two-level flat roofs. Taylor, D.A., [1984, p.3-13, eng] 41-1942

- Drift snow loads on multilevel roofs. O'Rourke, M.J., et al. [1984, p.14-25, eng] 41-1943

- Automated data acquisition for structural snow loads. Sack, R.L., et al. [1984, p.26-36, eng] 41-1944

- Frozen ice-shingle-gravel mixtures for roof supports in northern mines. Markov, V.S., et al. [1986, p.201-208, rus] 41-2179

- Wood damage accumulation by stochastic load models. Corotis, R.B., et al. [1986, p.2402-2415, eng] 41-2222

- Serviceability limit states: deflection. Galambos, T.V., et al. [1986, p.67-84, eng] 41-2532

- Roof blisters. Physical fitness building. Fort Lee, Virginia. Korhonen, C., et al. [1986, 15p., eng] 41-2611

- Snow loads in Alaska. Leslie, L.D., et al. [1987, 42p., eng] 41-3423

- Sloped roof snow loads using simulation. Sack, R.L., et al. [1987, p.1820-1833, eng] 41-4173

- Cold regions roof design. Tobiasson, W., [1987, p.457-458, eng] 41-4277

- Modeling of snow-block impact on structures. Mead, L.B., et al. [1986, p.321-324, eng] 41-4283

- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed. [1986, 81p., rus] 41-4546

- Roof supports used in mines of permafrost areas. Efremov, A.P., et al. [1986, p.30-33, rus] 41-4552

- Ice-pillar roof supports in northern mines. Stoliarov, A.M., et al. [1986, p.38-47, rus] 41-4554

- Vents and vapor retarders for roofs. Tobiasson, W., [1986, 11p., eng] 41-4575

- Roots

- Structure of the basic spruce forest in southern taiga. Dylis, N.V., et al. [1986, p.6-22, rus] 41-2346

- Nitrogen-fixing pseudomorphs from Arctic plant roots. Lifshitz, R., et al. [1986, p.251-255, eng] 41-2493

- Rotary drilling

- Studying hydraulic drive of drilling equipment at low temperatures. Makushkin, D.O., et al. [1978, p.63-68, rus] 41-1323

- Drilling instruments made of extra-hard materials. Collection of scientific papers. Vovchanovskii, I.F., ed. [1986, 87p., rus] 41-4498

- Drilling bits for hard rocks. Kosobrodov, I.U.A., et al. [1986, p.61-65, rus] 41-4499

- Roughness coefficient

- Theory for scalar roughness and transfer coefficients over snow and ice. Andreas, E.L., [1987, p.159-184, eng] 41-2364

- See: Surface roughness

- Route surveys

- Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed. [1986, 84p., rus] 41-543

- Safe shipping routes in Canadian Arctic waters. MacPhee, S., et al. [1986, p.820-838, eng] 41-2060

- Arctic route geotechnical characterization and analysis: a systems approach. Vita, C.L., [1986, 271p., eng] 41-2645

- Rubber

- Glass freezing as kinetics time scale singularity of new significance. Larsen, U., [1986, p.248-253, eng] 41-1621

- Influence of sub-zero temperatures on the performance of rubber shock-absorbers. Kotts, A.N., et al. [1986, p.95-98, rus] 41-2711

- Use of rubber-modified asphalt pavements in cold regions. Takallou, H.B., et al. [1987, p.541-574, eng] 41-4036

- Rubber-modified pavements for ice control in Alaska. Paulson, A., [1987, 2p., eng] 41-4578

- Rubber ice friction

- Susceptibility to icing on road pavements. Gustafson, K., [1986, 73p. + append., swe] 41-2567

- Ice traction of tires. Blaisdell, G.L., et al. [1986, 11p., eng] 41-3051

- Rubber snow friction

- Susceptibility to icing on road pavements. Gustafson, K., [1986, 73p. + append., swe] 41-2567

- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed. [1984, 24p., rus] 41-4503

- Methods of studying contact interactions of materials with ice and snow. Igoshin, V.A., et al. [1984, p.3-7, rus] 41-4504

- Runoff

- Effects of clearcutting on rain-snow runoff in western Oregon. Harr, R.D., [1986, p.1095-1100, eng] 41-72

- Regularities governing altitudinal belts of maximum river discharge in Tadzhikistan. Kemmerikh, A.O., [1986, p.166-170, rus] 41-128

- Snow management at ski areas: hydrologic effects. Kattelmann, R., [1985, p.264-272, eng] 41-453

- Permafrost. Benson, C., et al. [1986, p.99-106, eng] 41-476

- Field measurements under winter conditions. [1986, 323p., eng] 41-533

- Winter and summer low flows in Finland. Kuusisto, E., [1986, p.31-38, eng] 41-535

- Program of collecting data of ice jams. Laasanen, O., [1986, p.39-43, eng] 41-536

- River ice conditions in Finland. Maunula, M., [1986, p.45-54, eng] 41-537

- Runoff in relation to hydroelectric stations. W. Greenland. Thomsen, H.H., et al. [1985, p.100-103, eng] 41-574

- Runoff from rock glaciers in the southern Alps of France. Evini, M., [1984, p.27-40, fre] 41-623

- Climatic variation and runoff from Alpine glaciers. Collins, D.N., [1984, p.127-145, eng] 41-630

- Regularities of formation and the regime of hydrometeorological processes in mountainous regions of Tien Shan. Mamatkanov, D.M., ed. [1984, 110p., rus] 41-721

- Hydrologic regime of rivers in inner and central Tien Shan. Muzakeev, M.A., [1984, p.3-9, rus] 41-722

- Territorial concordance of long-range runoff fluctuations during vegetational periods on rivers of northern Kirgizia. Alamanov, S.K., [1984, p.63-68, rus] 41-726

- Mapping of the margin of the inland ice, W. Greenland. Thomsen, H.H., [1986, p.164-167, eng] 41-762

- Water resources in glaciers of the Syrdaria River basin. Akbarov, A.A., et al. [1986, p.80-88, rus] 41-778

- Influence of moraines on turbidity of glacial waters. Tikhonovskaya, A.A., et al. [1986, p.123-128, rus] 41-783

- Hydrologic conditions in the Klatt Bog area, Anchorage, Alaska. Glass, R.L., [1986, 19p., eng] 41-798

- Calculating river runoff in arid and humid cold regions. Plitkin, G.A., et al. [1986, p.122-130, rus] 41-815

- Swamp stability equations for taiga. Geleta, I.F., [1986, p.49-57, rus] 41-1366

- Peculiarities of water balance structure in different landscapes of Priangara. Berkin, N.S., et al. [1986, p.187-193, rus] 41-1375

- Application of NOAA/TIROS satellite data to snowmelt-runoff of Heihe Basin in Qilian Mountain. Zhang, S., et al. [1986, p.119-130, chi] 41-1459

- Eastern Snow Conference, 42nd, 1985. [1985, 303p., eng] 41-1479

- Integrated model of snowmelt quality for boreal forest sites. Roberge, J., et al. [1985, p.69-83, eng] 41-1486

- Snow accumulation and snowmelt runoff in a suburban environment. Buttle, J.M., [1985, p.126-138, eng] 41-1490

- Snow runoff of the Transcaucasian highland. Vladimirov, L.A., et al. [1985, p.545-547, rus] 41-1624

- Calculating runoff from the Tadzhikistan glaciers. Musoev, Z., [1986, p.131-135, rus] 41-1654

- Influence of glacier water on the formation of the chemical composition of mountain river water. Gachechiladze, G.A., [1986, p.78-82, eng] 41-1692

- Salt transfer processes in cryogenic soils. Panin, P.S., et al. [1986, p.245-250, rus] 41-1745

- Role of glaciers in the discharge of Pamiro-Alai rivers. Kemmerikh, A.O., [1985, p.79-84, rus] 41-1817

- Structure of the water balance of river drainage basins in the permafrost zone. Vasilenko, N.G., et al. [1986, p.326-330, eng] 41-1891

- Eastern Snow Conference, 41st, 1984. [1984, 248p., eng] 41-1941

- Snowmelt lysimeter for research applications. Greenan, H.J., et al. [1984, p.209-218, eng] 41-1962

- Design, instrumentation and operation of a snowmelt runoff plot. Goodison, B.E., et al. [1984, p.219-223, eng] 41-1963

- Variability of hydrological characteristics in western Siberia. Nikitin, S.P., et al. [1986, 204p., rus] 41-1969

- Snow hydrology. Brechtel, H.M., [1984, p.92-93, ger] 41-2077

- Large-area deterministic simulation of natural runoff from snowmelt based on Landsat MSS data. Baumgartner, M.F., et al. [1986, p.1013-1017, eng] 41-2303

- Snowmelt acidic shock study in south central Ontario. Goodison, B.E., et al. [1986, p.131-138, eng] 41-2618

- Behavior of ionic contaminants in snowpack of Turkey Lakes watershed. Semkin, R.G., et al. [1986, p.215-221, eng] 41-2619

- Temporal variation in aluminum speciation and concentration during snowmelt. Hendershot, W.H., et al. [1986, p.231-237, eng] 41-2620

- Factors affecting snowmelt streamwater chemistry in the Black Forest (West Germany). Feger, K.H., et al. [1986, p.257-265, eng] 41-2621

- Snowmelt in a boreal forest site: an integrated model of meltwater quality (SNOQUAL). Jones, H.G., et al. [1986, p.431-439, eng] 41-2622

- Formula for calculating runoff in the Lena River basin. Nemerinskaya, Zh.N., [1986, p.3-8, rus] 41-2648

- Improving the map of spring-flood runoff layer of the Chukchi Peninsula rivers. Boiarintsev, E.L., [1986, p.8-17, rus] 41-2649

- Oxygen-18 studies of snowmelt runoff in Precambrian shield watershed. Bottomley, D.J., et al. [1986, p.213-234, eng] 41-2697

- Seasonal variation of soil erosion by water in southwestern Quebec. Kirby, P.C., et al. [1987, p.55-63, eng] 41-2726

- Hydrological role of the Bilimbaev forests. Mironov, B.A., [1986, p.73-88, rus] 41-2876

- Use of snow-pillow data for melt rate input to the streamflow synthesis and reservoir regulation watershed model. Ferner, S.J., et al. [1987, p.118-126, eng] 41-2980

- Daily flow model of watersheds with snowmelt runoff, Colorado. Norris, J.M., et al. [1985, 32p., eng] 41-3305

- D/H ratios of snow and ground water in eastern New York State. Lawrence, J.R., [1987, p.519-521, eng] 41-3310

- Plot measurements of snowmelt runoff for varying soil conditions. Kane, D.L., et al, [1984, p.123-135, eng] 41-3320
- Water resources of Alaska. Snyder, E.F., comp., [1987, 24p., eng] 41-3338
- Modelling the areal depletion of a snowcover in a forested catchment. Buttle, J.M., et al, [1987, p.43-60, eng] 41-3405
- Recent research in snow hydrology. Dozier, J., [1987, p.153-161, eng] 41-3509
- Dye tracer experiments on the Findelengletscher, Switzerland. Moeri, T., et al, [1986, p.33-41, eng] 41-3524
- Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] 41-3742
- Aspects of glacial hydrology in Patagonia. Peña, H., et al, [1987, p.141-150, eng] 41-3839
- Studies of basin heat balance and snowmelt runoff models. Motoyama, H., [1986, p.1-53, eng] 41-3845
- Need for improved snow-cover monitoring techniques. Rango, A., et al, [1986, p.173-179, eng] 41-3895
- Snow cover mapping for runoff in an alpine basin. Baumgartner, M.F., et al, [1986, p.191-199, eng] 41-3897
- NRSA experience in hydrologic applications of space technology. Ramamoorthi, A.S., [1986, p.283-286, eng] 41-3903
- Forecasting snowmelt runoff of Himalayan rivers. Ramamoorthi, A.S., [1986, p.341-347, eng] 41-3904
- Satellite data input to Windy Gap computerized streamflow forecasting model. Eckhardt, J.R., et al, [1986, p.349-354, eng] 41-3905
- Runoff in glacier-covered watersheds of Langtang Valley, Nepal. Fukushima, Y., et al, [1987, p.11-18, eng] 41-3909
- Winter runoff in Langtang Valley, Nepal Himalayas. Motoyama, H., et al, [1987, p.29-33, eng] 41-3912
- Discharge from a glacier in West Kunlun Mts., China. Nakawo, M., et al, [1987, p.111-114, eng] 41-3922
- Hydrological data of Langtang Valley, Nepal Himalayas. Fukushima, Y., et al, [1987, p.115-120, eng] 41-3923
- Hydrologic calculations for economic development of the BAM zone. Evstignejev, V.M., et al, [1986, p.156, rus] 41-3983
- Remotely sensed snow cover in water supply forecasting. Shafer, B.A., [1986, p.1045-1056, eng] 41-3993
- Spatial analysis of snow- and rain-generated highflows in southern Ontario. Irvine, K.N., et al, [1987, p.140-149, eng] 41-4076
- Maximum river runoff in the Angara basin. Leksakova, V.D., [1987, 132p., rus] 41-4108
- Basic components of chemical balance of the Arctic Ocean. Rusanov, V.P., [1986, p.40-51, rus] 41-4195
- Forest hydrology and watershed management. Swanson, R.H., ed, [1987, 625p., eng] 41-4313
- Effects of forests on wetland runoff during spring. Woo, M.-K., et al, [1987, p.297-307, eng] 41-4319
- Glacier mass balance and river runoff in Central Asia. Akbarov, A.A., et al, [1986, p.56-59, 170-173, rus] 41-4340
- Runoff in basins with variable extent of glaciation. Oerter, H., et al, [1986, p.59-64, 173-178, rus] 41-4341
- Modeling runoff from Vernagtferner, Austria. Escher-Vetter, H., et al, [1986, p.65-69, 178-182, rus] 41-4342
- Calculating runoff hydrograph for the Marukh mountain-glacier basin, Caucasus. Balasova, V.A., et al, [1986, p.69-74, 182-186, rus] 41-4343
- Variations in mountain river runoff related to climatic changes. Semenov, V.A., et al, [1986, p.78-82, 191-195, rus] 41-4345
- Use of remote-sensing data in modelling run-off from the Greenland ice sheet. Thomsen, H.H., et al, [1987, p.215-217, eng] 41-4461
- Satellite snow-cover monitoring and runoff in the Qilian Mts., China. Zeng, Q., et al, [1987, p.225-228, eng] 41-4464
- Spring runoff processes in Åstådalen, Norway. Englund, J.-O., [1986, p.1-20, eng] 41-4512
- Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed, [1986, 135p., rus] 41-4572
- See also: Stream flow
- Runoff forecasting**
- Expert system for snowmelt runoff modeling and forecasting. Engman, E.T., et al, [1986, p.174-180, eng] 41-249
- Workshop on Alaskan Hydrology, Apr. 1985. [1986, 106p. + 3 append., eng] 41-471
- Effects of glaciers on runoff and runoff forecasting. Benson, C., et al, [1986, p.6-32, eng] 41-472
- Effects of snowpack and watershed on snowmelt runoff. McDonnell, J.J., et al, [1985, p.262-266, eng] 41-1502
- Snowpack depletion in a forested catchment. Buttle, J.M., et al, [1985, p.267-271, eng] 41-1503
- Energy balance modelling of snowmelt in a suburban environment: a progress report. Buttle, J.M., et al, [1984, p.204-208, eng] 41-1961
- Maximum river runoff in the Angara basin. Leksakova, V.D., [1987, 132p., rus] 41-4108
- Hydrological model of snowmelt runoff. Cavadias, G., et al, [1986, p.21-30, eng] 41-4513
- Flow forecasts of the Indus River, Pakistan. Makhdoom, M.T.A., et al, [1986, p.171-184, eng] 41-4517
- Runways**
- Effects of cold environment on rapid runway repairs. Abele, G., [1986, p.1-9, eng] 41-1355
- Deicing/anti-icing fluid—runways and taxiways. [1980, 8p., eng] 41-1757
- Measurement and maintenance of runway friction at Canadian airfields. Argue, G.H., et al, [1987, p.949-979, eng] 41-4049
- Casey snow runway data report, 1983-84. Russell-Head, D.S., et al, [1984, 98p., eng] 41-4526
- Casey snow runway tests, 1983-84. Russell-Head, D.S., et al, [1984, 111p., eng] 41-4527
- Casey snow runway meteorological records, 1984. Russell-Head, D.S., et al, [1987, 98p., eng] 41-4528
- See also: Aircraft landing areas; Ice runways
- Safety**
- Safe speeds for navigation in ice. Tunik, A.L., [1986, p.1106-1124, eng] 41-1148
- Increasing safety of underground mining by using power driven equipment. Kivileva, N.M., [1986, p.25-30, rus] 41-4551
- See also: Accidents
- Saint Lawrence River**
- Ice cover charts, upper St. Lawrence River, 1971-81. Vol. 1 (Pt. B). Shen, H.T., et al, [1982, p.249-505, eng] 41-174
- Saline ice**
- See: Salt ice
- Saline soils**
- Compressive deformation of frozen saline soils. Kondakova, O.A., et al, [1985, p.99-100, rus] 41-324
- Engineering and geological investigations of saline soils. Bakenov, B.B., et al, [1986, 245p., rus] 41-996
- Salt transfer processes in cryogenic soils. Panin, P.S., et al, [1986, p.245-250, rus] 41-1745
- Solubility of ice in frozen ground induced by salt solutions. Gaidenko, E.I., [1986, p.32-36, rus] 41-2150
- Regularities governing the salinity of frozen marine deposits. Dubikov, G.I., [1986, p.14-27, rus] 41-2815
- Engineering geology in construction. Ziagiurov, R.S., et al, [1986, 175p., rus] 41-2889
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, [1984, 193p., rus] 41-4086
- Salt transfer from soil to snow. Kazantsev, V.A., [1984, p.151-155, rus] 41-4091
- Problems of origin and geography of soils. Liverovskii, I.U.A., [1987, 248p., rus] 41-4555
- Salinity**
- Engineering and geological investigations of saline soils. Bakenov, B.B., et al, [1986, 245p., rus] 41-996
- Physical oceanography near the North Pole. Pounder, E.R., [1986, p.11763-11773, eng] 41-1025
- Hypersaline gradients in two Canadian High Arctic lakes. Stewart, K.M., et al, [1986, p.1795-1803, eng] 41-1222
- Salt and frost heave damage of lining in hydraulic structures. Wang, Y., [1986, p.291-294, chi] 41-1433
- Salt transfer processes in cryogenic soils. Panin, P.S., et al, [1986, p.245-250, rus] 41-1745
- Convective flows of cold water over a flat surface. Jang, J.Y., et al, [1987, p.85-89, eng] 41-2406
- West Spitsbergen current and adjacent waters in Fram Strait. Weigel, A.M., [1987, 98p., eng] 41-3306
- On the response of the fjord Gullmaren under ice cover. Djurfeldt, L., [1987, p.1557-5167, eng] 41-3345
- Structure, internal waves and intrusions in the Greenland Sea ice edge zone. Foster, T.D., et al, [1987, p.6903-6910, eng] 41-4246
- Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., [1987, p.134-146, eng] 41-4278
- See also: Ice salinity
- Salt extraction**
- See: Desalting
- Salt ice**
- Structure and dielectric properties at 4.8 and 9.5 GHz of saline ice. Arcone, S.A., et al, [1986, p.14281-14303, eng] 41-1857
- Deflation of salts from ice surface in the Aral Sea. Tsytserin, A.G., [1986, p.62-69, rus] 41-1971
- Salt lakes**
- Limnology of Garrow Lake, NWT, Canada. Dickman, M., et al, [1987, p.531-549, eng] 41-3854
- Salt spray**
- See: Sea spray
- Salt water**
- On free convection melting of a solid immersed in a hot dissimilar fluid. Chen, M.M., et al, [1986, p.1087-1093, eng] 41-393
- Buoyancy induced flows in cold pure and saline water. Qureshi, Z.H., et al, [1986, p.1383-1392, eng] 41-565
- Monitoring a sump containing drilling mud with a high salt content. Nenninger, R.D., [1987, 47p., eng] 41-3076
- See also: Sea water
- Salting**
- Physics of snow and ice control on roads and highways. Hanley, K., [1979, 15p., eng] 41-233
- Role of salt in snow and ice control in Ontario. McBride, N., et al, [1979, 68p., eng] 41-236
- Sodium in domestic wells of York region. Joy, M., [1979, 17p., eng] 41-237
- Ontario municipal experiments to reduce the use of road salt. Fabricius, T., et al, [1980, 95p., eng] 41-238
- Application rates of salt on highways and sidewalks. Adamache, M., et al, [1980, 51p., eng] 41-239
- Effects of road de-icing salt on stream invertebrates. Kersey, K., [1981, 21p., eng] 41-240
- Designing for automotive corrosion prevention. [1978, 132p., eng] 41-377
- De-icing chemicals used in North America and overseas. Keyser, J.H., [1978, p.5-13, eng] 41-379
- Salting practices—trends and issues. Swets, D.H., [1978, p.128-132, eng] 41-381
- Winter Service Congress, 1985. [1985, 68p., ger] 41-384
- Ecological factors in the winter service. Dedić, O., [1985, p.11-16, ger] 41-385
- Winter service in Steiermark, Austria. Dirnböck, G., [1985, p.17-21, ger] 41-386
- Optimization of the winter service in Rheinland-Pfalz. Rude, B.J., [1985, p.41-46, ger] 41-389
- Problem of the resistance of concrete surfaces to salting. Stehno, G., [1985, p.59-63, ger] 41-391
- Concrete resistance to frost and salt. Hildorf, H.K., et al, [1986, p.57-62, ger] 41-832
- Engineering and geological investigations of saline soils. Bakenov, B.B., et al, [1986, 245p., rus] 41-996
- Effect of salt application on roadway safety and mobility. Jones, P.H., et al, [1986, 90p., eng] 41-1413
- Developing machinery and equipment for winter road maintenance. Tampo, T., [1983, p.268-269, fin] 41-1935
- Damage of concrete sleepers by calcium chloride. Bernstson, L., et al, [1982, p.87-92, eng] 41-2113
- Asphalt overlay on the Granville bridge. Koubaky, P., [1986, p.132-139, eng] 41-2203
- Deterioration of parking garages: preventative design. Tay, D.C.K., [1985, p.228-237, eng] 41-3193
- Chemical solutions to the chemical problem. Minsk, L.D., [1985, p.238-244, eng] 41-3194
- Deterioration of aggregates—the underlying causes. Hudac, P., [1987, p.1325-1342, eng] 41-3729
- Ice prediction package cuts costs on Cheshire's gritting operation. [1987, p.20-22, eng] 41-4331
- Effect of salting on surface and ground water. Bischofberger, W., [1987, p.192-197, ger] 41-4519
- Benefits and costs in the use of salt to deice highways. Brenner, R., et al, [1976, 140p., eng] 41-4606
- Corrosive deicing chemicals and winter road maintenance. Nottingham, D., et al, [1983, 35p., eng] 41-4607
- Samplers**
- Improved sampler PLIAS-2 for capturing ice-forming nuclei on membrane filters. Silaev, A.V., et al, [1986, p.76-80, rus] 41-1450
- Studying vertical distribution of ice-forming nuclei. Khusid, S.V., et al, [1986, p.85-89, rus] 41-1452
- Device and procedure for subglacial water sampling. Nasyrov, G., [1983, p.60-61, rus] 41-1828
- Modification of bottle bathometer for studying bacterioplankton at shallow depths. Bafta, V.A., [1986, p.53-55, rus] 41-2389
- Aerosol samplers used in size distribution study. Berezinskii, N.A., et al, [1986, p.55-63, rus] 41-3671
- See also: Core samplers; Snow samplers
- Sampling**
- Methods of measuring elastic wave parameters in snow samples. Bagov, M.M., [1985, p.7-14, rus] 41-838
- Modification of bottle bathometer for studying bacterioplankton at shallow depths. Bafta, V.A., [1986, p.53-55, rus] 41-2389
- Freezing technique for sampling skeletal, structureless forest soils. Froehlich, H.A., et al, [1986, p.1640-1642, eng] 41-2693
- Aerosol samplers used in size distribution study. Berezinskii, N.A., et al, [1986, p.55-63, rus] 41-3671
- All-Union Conference on nuclear-physical methods of environmental management, 3rd, Toms'k, May 21-23, 1985. Proceedings. [1987, 172p., rus] 41-3944
- Content of mercury in the snow cover of Pribyalka. Posolov, A.L., et al, [1987, p.56-60, rus] 41-3946
- New sampling technique for northern placer mines. Riabets, N.I., et al, [1986, p.10-15, rus] 41-4549
- See also: Ice sampling
- Sanding**
- Units and vehicles for spreading de-icing agents. Kotte, G., [1986, p.12-16, eng] 41-2326
- Optimum sand specifications for roadway ice control. Final report. Connor, B., et al, [1982, 36p., eng] 41-3047
- Hot sand for improved traction on icy roads. Reckard, M.K., [1985, 7p., eng] 41-4000
- Application of hot sand for winter ice control—laboratory phase. Hayhoe, G.F., [1984, 33p. + append., eng] 41-4073

- Sands**  
Development of frost heave deformations in freezing, coarsely clastic ground. Petrova, M.A., et al. [1985, p.89-91, rus] **41-319**  
Distribution of stresses and strains in sandy bases of rigid stamps. Krivorotov, A.P., et al. [1985, p.100-103, rus] **41-325**  
Shear strength loss of a silty sand subjected to frost action. Gifford, G.P., [1984, 296p., eng] **41-901**  
Studies of plain and reinforced frozen soil structures. Soo, S., [1984, 299p., eng] **41-984**  
Anti-heave effect of middle coarse sand cushion. Zhou, Y., [1986, p.227-232, chi] **41-1420**  
Experimental study on frost susceptibility of wind-blown sands. Chen, X., et al. [1986, p.233-238, chi] **41-1421**  
Anti-heave effect of wind-blown sands in irrigation canals. Zhu, D., et al. [1986, p.239-244, chi] **41-1422**  
Modified method for intensive dynamic compaction of weak soils. Marinescu, K., [1986, p.71-74, eng] **41-1851**  
Freeze-thaw of pore moisture in sandy rocks. Medvedskii, R.I., [1986, p.543-549, rus] **41-1894**  
Concretes with unsorted sand-gravel for cold regions. Sadovich, M.A., et al. [1986, p.50-53, rus] **41-1924**  
Effect of hydrostatic stress on creep of a frozen sand. Domaschuk, L., et al. [1987, p.119-124, eng] **41-2412**  
Permafrost formation in littoral and sublittoral zones of northern Eurasia. Maslov, A.D., [1986, p.79-85, rus] **41-2539**  
**Composition and behavior of sand-clay soils under vibration.** Ostrovskaia, O.V., [1986, p.108-111, rus] **41-2542**  
Analysis of frozen sand beams. Wen, R.K., et al. [1983, p.790-793, eng] **41-2687**  
Deformation properties of washed-up sands under permafrost conditions. Bad'anova, L.I., [1986, p.157-165, rus] **41-2835**  
Using lesser diameter charges in blasting frozen placer deposits. Shchegolev, S.V., [1986, p.81-85, rus] **41-2907**  
**Relationship of composition and behavior of sandy-clayey soils upon vibration.** Ostrovskaia, O.V., [1986, p.112-115, eng] **41-3018**  
Eolian dunes in Victoria Land. Miotke, F.-D., [1985, p.79-125, ger] **41-3252**  
Grass-shrub vegetation developing on Arctic sand dunes. Sergienko, V.G., [1987, p.208-215, rus] **41-3610**  
Effect of dynamic action on compressibility of thawing sands. Inozemtsev, V.K., [1987, p.235-240, eng] **41-4165**  
Experience in studying thermal properties of ground. Zaitsev, V.S., [1986, p.115-118, rus] **41-4466**  
Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed. [1986, 81p., rus] **41-4546**  
Concentration of placer minerals in hydraulic development of frozen clayey sands by washing with weak water streams. Mironov, V.P., et al. [1986, p.3-7, rus] **41-4547**  
**Sastrugi**  
Aerosol transport processes in the Antarctic. Hogan, A.W., et al. [1985, p.205-206, eng] **41-3324**  
Surface windfield over the antarctic ice sheet. Parish, T.R., et al. [1987, p.51-54, eng] **41-3683**  
**Satellites**  
See: Spacecraft  
**Saturation**  
Methods of calculating mudflow characteristics. Vinogradov, I.U.B., [1985, p.83-89, rus] **41-2730**  
See also: Supersaturation  
**Scaling**  
Scaling tests of silica fume concrete and the critical spacing factor concept. Pigeon, M., et al. [1987, p.1155-1182, eng] **41-3722**  
**Scanning electron microscopy**  
Arctic-alpine soils, southern Norway. Mellor, A., [1986, p.327-336, eng] **41-1180**  
**Scattering**  
Remote sensing of snow-covered ice. Lin, F.C., et al. [1986, p.4.5.1-4.5.4, eng] **41-97**  
Scattering and attenuation of millimeter wavelength radiation by snow. O'Brien, S.G., [1986, 138p., eng] **41-2644**  
Analysis of acoustical features of laboratory grown sea ice. Stanton, T.K., et al. [1986, p.1486-1494, eng] **41-3068**  
See also: Backscattering; Light scattering  
**Scotia Sea**  
Weddell-Scotia Sea MIZ, October 1984. Crasey, F.D., et al. [1986, p.3920-3924, eng] **41-93**  
Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al. [1986, p.3920-3924, eng] **41-1361**  
Thermobaric and ice conditions, South Orkney region. Petrov, L.S., et al. [1986, p.59-65, eng] **41-3950**  
Density nutrients and phytoplankton in the ice edge zone of the Weddell-Scotia Sea. Nelson, D.M., et al. [1987, p.7181-7190, eng] **41-4270**  
**Sea air interaction**  
See: Air water interactions  
**Sea currents**  
See: Ocean currents  
**Sea floor**  
See: Ocean bottom  
**Sea ice**  
Weddell-Scotia Sea MIZ, October 1984. Crasey, F.D., et al. [1986, p.3920-3924, eng] **41-93**  
SAR/SCAT intercomparison of microwave signatures of Arctic sea ice. Onstott, R.G., et al. [1986, p.1.7.1-1.7.3, eng] **41-96**  
Coupled ice-mixed layer model for the Greenland Sea. Houssais, M.N., [1986, p.225-260, eng] **41-150**  
Micromechanics approach to sea ice dynamics. Ostojca-Starzewski, M., et al. [1986, p.267-281, eng] **41-151**  
Statistical kinematics for the sea ice discontinuum. Thorndike, A.S., [1986, p.282-295, eng] **41-152**  
Data on ice mechanics from remote sensing, Beaufort Sea. Gower, J.F.R., et al. [1986, p.509-522, eng] **41-162**  
Sea ice drift measurements using satellite-tracking balloons. Nazarenko, D.M., et al. [1986, p.583-597, eng] **41-168**  
Late Pleistocene sedimentation processes on the antarctic continental shelf. Grobe, H., [1986, 121p. + figs., ger] **41-267**  
Sea ice breakup and tidal flats processes, Frobiisher Bay, Baffin Island. McCann, S.B., et al. [1986, p.168-180, eng] **41-362**  
Arctic sea ice and ice island movement, thickness and mechanical properties. Sackinger, W.M., et al. [1986, p.63-80, eng] **41-367**  
Seasonal variation of chlorophyll-a in fast ice near Davis Station. Lu, P., [1986, p.11-19, chi] **41-397**  
Some ecological observations on antarctic ice algae. Zhang, K., et al. [1986, p.49-59, chi] **41-399**  
Formation of the ice algae layer in antarctic sea ice. Zhang, K., et al. [1986, p.60-65, chi] **41-400**  
Ice algae in sea ice near Davis Station, Antarctica. Yu, J., et al. [1986, p.66-71, chi] **41-401**  
Dominant diatom in the sea ice near Davis Station. Zhang, K., et al. [1986, p.72-75, chi] **41-402**  
Identification of phytoplankton pigments in waters near Davis Station. Li, B., et al. [1986, p.110-115, chi] **41-403**  
Nanoplankton in the waters near Davis Station. Mao, X., et al. [1986, p.130-135, chi] **41-404**  
Reports of US/USSR Weddell Polynya Expedition, Vol.8. Ackley, S.F., ed. [1986, 158p., eng] **41-460**  
Impulse radar sounding of level first-year sea ice from an icebreaker. Martinson, C.R., [1985, 9p., eng] **41-461**  
Combined optical and radar methods for studying the environment. Shestopalov, V.P., et al. [1984, p.963-964, eng] **41-515**  
Use of deuterium to trace the origin of drifting sea ice. Arnason, B., [1985, p.85-89, eng] **41-591**  
Chemical effects of sea water on sea ice melt water. Anderson, L.G., et al. [1985, p.90-96, eng] **41-592**  
Lipids of the antarctic sea ice diatom *Nitzschia cylindrus*. Nichols, P.D., et al. [1986, p.1649-1653, eng] **41-614**  
Arctic ice shelf growth, fiord oceanography and climate. Jeffries, M.O., et al. [1984, p.147-153, eng] **41-631**  
Vehicular transport at McMurdo. Dibbern, J.S., [1986, 31p., eng] **41-638**  
Method for growing large single crystals of sea ice. Kawamura, T., [1986, p.320-303, eng] **41-691**  
Snow and ice in Earth's environment. Kotliakov, V.M., [1986, 157p., rus] **41-698**  
High-precision distance measurement with an unmanned moving target. Ito, H., et al. [1986, p.93-95, eng] **41-746**  
Scientific polar research in the Arctic and Antarctica. Thoren, R., [1986, 43p., eng] **41-787**  
Synoptic-scale influences of snow cover and sea ice. Ross, B., et al. [1986, p.1795-1810, eng] **41-988**  
Classifying sea ice with microwave imagery. Eppler, D.T., et al. [1986, p.10.661-10.695, eng] **41-1008**  
On the spacing and draft distributions for pressure ridge keels. Wadhams, P., et al. [1986, p.10.697-10.708, eng] **41-1009**  
Large-scale short-period sea ice atmosphere interaction. Cahalan, R.F., et al. [1986, p.10.709-10.717, eng] **41-1010**  
Ice pack motion from AVHRR imagery. Ninnis, R.M., et al. [1986, p.10.725-10.734, eng] **41-1012**  
Organism losses during sea ice melting. Garrison, D.L., et al. [1986, p.237-239, eng] **41-1016**  
Data sensitivities of sea ice drift and ocean stress. Walsh, J.E., et al. [1986, p.11.657-11.675, eng] **41-1023**  
Corrosion resistance tests for low-temperature construction. Itoh, K., et al. [1986, p.869-896, eng] **41-1136**  
Arctic offshore steels. Räsänen, E., [1986, p.952-969, eng] **41-1140**  
Inshore seasonal changes in diatoms near Davis Station. Everitt, D.A., et al. [1986, p.3-12, eng] **41-1173**  
Roughness and transfer coefficients over snow and sea ice. Andreas, E.L., [1986, 19p., eng] **41-1263**  
Pliocene variations of Antarctic Convergence in southwest Atlantic. Ciesielski, P.F., et al. [1986, p.197-232, eng] **41-1264**  
Effect of brine on sea ice heat conductivity. Nazintsev, I.U.L., [1986, p.107-115, rus] **41-1266**  
Unloading of a large tanker near Mirnyy Station. Kozlovskii, A.M., et al. [1986, p.116-119, rus] **41-1267**  
Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al. [1984, p.159-165, eng] **41-1280**  
Alignment of crystals in sea ice due to fluid motion. Langhorne, P.J., et al. [1986, p.197-214, eng] **41-1289**  
In situ measurements of the resistivity of antarctic sea ice. Buckley, R.G., et al. [1986, p.281-290, eng] **41-1295**  
Offshore outlook: the American Arctic. Jahns, H.O., [1985, p.76-82, eng] **41-1328**  
Army research could reduce dangers posed by sea ice. Tucker, W.B., [1984, p.20-24, eng] **41-1329**  
Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al. [1986, p.3920-3924, eng] **41-1361**  
There are different types of ice. Berdnikov, [1986, p.46-47, rus] **41-1399**  
Detection of sea-ice features using K(a)-band radar. Lewis, E.O., et al. [1985, p.499-500, eng] **41-1409**  
Comments on the antarctic gravity anomaly map. Segawa, J., et al. [1986, p.19-22, eng] **41-1471**  
Nutrient limitation of sea ice microalgae. Maestrini, S., et al. [1986, p.969-982, eng] **41-14**  
Sea ice and the antarctic winter atmospheric circulation. Mitchell, J.F.B., et al. [1986, p.953-969, eng] **41-1474**  
Some physical properties of snowcover on evolving first year sea ice. Crocker, G.B., et al. [1985, p.84-95, eng] **41-1487**  
Constitutional supercooling in natural ice. Jones, R.E., [1985, p.188-196, eng] **41-1494**  
Microwave remote sensing—active and passive. Ulaby, F.T., et al. [1981, 2162p. (3 vols.), eng] **41-1508**  
High-resolution electromagnetic altimetry over the ocean. Won, I.J., [1986, p.327-332, eng] **41-1511**  
Photosynthetic adaptation of sea ice microalgae in Hudson Bay. Legendre, L., et al. [1986, p.321-326, eng] **41-1554**  
Probabilistic theories for the failure of sea ice. Maes, M.A., et al. [1986, p.37-54, eng] **41-1581**  
Evaluation of the rheological properties of columnar ridge sea ice. Brown, R.L., et al. [1986, p.55-66, eng] **41-1582**  
Mechanical behavior of sea ice. Sunder, S.S., [1986, p.87-102, eng] **41-1585**  
Centrifugal modelling of sea ice. Lovell, M.S., et al. [1986, p.105-113, eng] **41-1586**  
Sea ice pressure ridges. Bishop, G.C., et al. [1986, p.157-184, eng] **41-1591**  
Experimental study on permeability coefficient of sea ice. Saeki, H., et al. [1986, p.237-246, eng] **41-1595**  
Sea ice strength measurements from the inner Danish waters in early 1985. Christensen, F.T., [1986, p.247-253, eng] **41-1596**  
Microalgal carbon assimilation in sea ice of East Antarctica. McConville, M.J., et al. [1985, p.135-141, eng] **41-1629**  
Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al. [1986, p.199-228, rus] **41-1668**  
OTH radar measurements of sea ice and ice backscatter reflectivity. Ring, W.F., et al. [1982, 15p., eng] **41-1758**  
Structure and dielectric properties at 4.8 and 9.5 GHz of saline ice. Arcone, S.A., et al. [1986, p.14.281-14.303, eng] **41-1857**  
Water stress and currents under sea ice. Shirasawa, K., [1986, p.14.305-14.316, eng] **41-1858**  
Atmospheric boundary layer modification in the marginal ice zone. Bennett, T.J., Jr., et al. [1986, p.13.033-13.044, eng] **41-1861**  
International symbols for marine ice maps and nomenclature of marine ice. [1986, 45p., rus] **41-1896**  
Observations of chlorophylls in high arctic sea ice in winter. Roberts, A.T., et al. [1984, p.148-152, eng] **41-1956**  
Air cushion vehicle *Larus* in the Beaufort Sea. Wainwright, J., et al. [1986, p.693-709, eng] **41-2052**  
Glacial and thermal processes originating during sea-ice and fresh-water interactions and their effect on mechanical properties of ice. Tregub, G.A., et al. [1986, p.153-158, rus] **41-2169**  
Accumulation and preservation of massive artificial sea ice. Kamenskii, R.M., et al. [1986, p.167-172, rus] **41-2172**  
Bibliography and analytical data on North Slope. [1979, 60p., eng] **41-2193**  
Ice-seawater turbulent boundary layer interaction with melting or freezing. Mellor, G.L., et al. [1986, p.1829-1846, eng] **41-2219**  
Bulk transfer coefficients for heat and momentum over leads and polynyas. Andreas, E.L., et al. [1986, p.1875-1883, eng] **41-2220**  
Nutrient fluxes during extended blooms of Arctic ice algae. Cota, G.F., et al. [1987, p.1951-1962, eng] **41-2254**  
Properties of salt water ice as material for artificial islands construction. Mirzoev, D.A., et al. [1986, p.187-194, eng] **41-2274**  
Passive microwave observations of sea ice growth. Grenfell, T.C., et al. [1986, p.826-831, eng] **41-2296**  
Microwave dielectric, structural and salinity properties of sea ice. Arcone, S.A., et al. [1986, p.832-839, eng] **41-2297**



- Snow wetness and sea-ice classification using SAR imagery. Eom, H.J., et al, [1986, p.937-939, eng] 41-2301
- Acoustic emission study on multi-year sea ice in an arctic field laboratory. Sinha, N.K., [1985, p.S290-S293, eng] 41-2309
- Observing the polar regions from space. Thomas, R.H., [1984, p.165-171, eng] 41-2338
- Experimental investigations on scale effect of Bohai sea ice. Shen, W., et al, [1987, p.173-179, eng] 41-2419
- Confined compressive strength of horizontal first-year sea ice samples. Richter-Menge, J.A., [1987, p.197-207, eng] 41-2422
- Microstructure and thermodynamics of sea ice. Brown, R.L., [1987, p.209-213, eng] 41-2423
- Mechanical properties of antarctic sea ice (II). Urabe, N., et al, [1987, p.239-244, eng] 41-2427
- Creep analysis of a first-year sea ice sheet. Phifer, E.H., [1987, p.351-356, eng] 41-2442
- Probabilistic analysis of sea ice in North Bohai Bay. Liu, T., et al, [1987, p.387-391, eng] 41-2447
- Triaxial testing of first-year sea ice. Richter-Menge, J.A., et al, [1986, 41p., eng] 41-2547
- Determination of the ice load on elements of marine hydraulic structures. Gol'din, A.L., et al, [1987, p.417-420, eng] 41-2601
- Land ice/sea ice transition at J-9 on Ross Ice Shelf. Grootes, P.M., et al, [1985, p.66-68, eng] 41-2628
- Discrimination of different arctic snow and sea ice surfaces. Welsh, J.P., et al, [1986, p.31-56, eng] 41-2654
- Electromagnetic properties of sea ice. Kovacs, A., et al, [1986, p.57-133, eng] 41-2655
- Role of sea ice motion in ice penetration. Denner, W.W., et al, [1986, p.135-153, eng] 41-2656
- Thermal hole opener. Hansen, D.P., [1986, p.565-574, eng] 41-2677
- Ice-edge eddies in the Fram Strait marginal ice zone. Johannessen, O.M., et al, [1987, p.427-429, eng] 41-2802
- Mesoscale oceanographic processes beneath the ice of Fram Strait. Manley, T.O., et al, [1987, p.432-434, eng] 41-2804
- Physical properties of sea ice discharged from Fram Strait. Gow, A.J., et al, [1987, p.436-439, eng] 41-2806
- Comments on *A heat balance for the Bering Sea ice edge*. Kantha, L.H., [1986, p.2205-2208, eng] 41-2843
- Atlas of the polar regions. [1985, 66p., eng] 41-2884
- Yearbook of the Norwegian Polar Research Institute, 1985. [1985, p.12-15, eng] 41-2888
- Recent advances in ice mechanics in Canada. Sinha, N.K., et al, [1987, p.15-35, eng] 41-2932
- Advances in sea ice mechanics in the USA. Sodhi, D.S., et al, [1987, p.37-49, eng] 41-2933
- Vertical sediment flux beneath annual sea ice, McMurdo Sound, Antarctica. Dunbar, R.B., et al, [1985, p.109-111, eng] 41-2950
- Ross Sea oceanography, 1985. Pillsbury, R.D., et al, [1985, p.112-113, eng] 41-2951
- Oceanic inclusions in the J-9 sea-ice core. Zotikov, I.A., et al, [1985, p.113-115, eng] 41-2952
- Salinity, alkalinity, and calcium of the Weddell Sea ice. Chen, C.-T.A., [1985, p.117-119, eng] 41-2953
- Ice nucleation activity of antarctic marine microorganisms. Parker, L.V., et al, [1985, p.126-128, eng] 41-2955
- Ecology of sea ice microbial communities of McMurdo Sound. Kottmeier, S.T., et al, [1985, p.128-130, eng] 41-2956
- Plankton from the southwestern Atlantic Ocean. Yxell, G.A., et al, [1985, p.143-145, eng] 41-2959
- Growth, structure, and properties of sea ice. Weeks, W.F., et al, [1986, p.9-164, eng] 41-2987
- Mechanical behavior of sea ice. Mellor, M., [1986, p.165-241, eng] 41-2988
- Kinematics of sea ice. Thorndike, A.S., [1986, p.489-549, eng] 41-2993
- Crystal structure of Fram Strait sea ice. Gow, A.J., et al, [1986, p.20-29, eng] 41-3056
- Bottom topography effect on ice flow, barotropic flow and baroclinic flow. Hakkinen, S., [1987, p.3807-3820, eng] 41-3062
- Comment on "Atmospheric boundary layer modification in the marginal ice zone" by T.J. Bennett, Jr. and K. Hunkins. Andreas, E.L., [1987, p.3963-3969, eng] 41-3064
- Analysis of acoustical features of laboratory grown sea ice. Stanton, T.K., et al, [1986, p.1486-1494, eng] 41-3068
- Forecasting sea ice movement through Bering Strait. Kozo, T.L., et al, [1987, p.193-207, eng] 41-3079
- Recurring polynyas over the Comanaut Sea and the Maud Rise. Comiso, J.C., et al, [1987, p.2819-2833, eng] 41-3080
- Preliminary simulation of the formation and infilling of sea ice gouges. Weeks, W.F., et al, [1986, p.259-268, eng] 41-3118
- Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the development of a antarctic sea ice microbial communities. Palmisano, A.C., et al, [1987, p.165-173, eng] 41-3132
- Primary production in annual sea ice in McMurdo Sound. Kottmeier, S.T., et al, [1987, p.175-186, eng] 41-3133
- Environmental and photosynthetic relationships in antarctic sea ice algae. Palmisano, A.C., et al, [1987, p.299-306, eng] 41-3146
- Operation Deep Freeze 87 end of season report. [1987, Var. p., eng] 41-3164
- Studying sea-atmosphere interactions during the cold season. Bogorodskii, P.V., et al, [1986, p.151-157, eng] 41-3267
- On the oceanic circulation near a shelf-edge. Van Heijst, G.J.F., [1987, p.37-56, eng] 41-3273
- Modelling the response of the West Antarctic Ice Sheet to a climatic warming. Budd, W.F., et al, [1987, p.321-358, eng] 41-3287
- Analysis of the tensor dielectric constant of sea ice at microwave frequencies. Stogryn, A., [1987, p.147-158, eng] 41-3315
- Seasonal and regional variations of active/passive microwave signatures of sea ice. Livingston, C.E., et al, [1987, p.159-173, eng] 41-3316
- Microwave sea-ice signatures near the onset of melt. Livingston, C.E., et al, [1987, p.174-187, eng] 41-3317
- Upwelling at the ice edge: a mechanism for deep water formation. Hakkinen, S., [1987, p.5031-5034, eng] 41-3344
- On the response of the fjord Gullmaren under ice cover. Djurfeldt, L., [1987, p.1557-1567, eng] 41-3345
- Ice diatom floras in Arthur Harbor. Krebs, W.N., et al, [1987, p.163-171, eng] 41-3427
- Antarctic ice and rocks. Doake, C.S.M., [1987, p.138-189, eng] 41-3532
- Coupled marine ice-stream-ice-shelf model. Muszynski, I., et al, [1987, p.3-15, eng] 41-3590
- Thermodynamic model of first year sea ice. Gabison, R., [1987, p.105-119, eng] 41-3603
- Surface chlorophyll a distribution in the marginal ice zone, 1984-1985. Fukuda, Y., et al, [1986, p.24-33, eng] 41-3630
- Ice-algae photosynthesis under fast ice at Showa Station. Satoh, H., et al, [1986, p.34-42, eng] 41-3631
- Decomposition of organic matter under fast ice at Lützow-Holm Bay. Matsuda, O., et al, [1986, p.55-66, eng] 41-3632
- Sea ice meiofauna at Showa Station. Hoshiai, T., et al, [1986, p.118-124, eng] 41-3634
- Scattering and absorption of visible light by sea ice. Buckley, R.G., et al, [1987, p.867-869, eng] 41-3639
- Random discontinuous model of sea ice motion. Thorndike, A.S., [1987, p.6515-6520, eng] 41-3642
- Microwave radiometer weather-correcting sea ice algorithm. Walters, J.M., et al, [1987, p.6521-6534, eng] 41-3643
- Step frequency radar for the measurement of sea ice thickness. Okamoto, K., et al, [1986, p.56-65, eng] 41-3658
- JARE-25 oceanographic and marine biological data, Feb. 1984-Jan. 1985. Matsuda, O., et al, [1987, 21p., eng] 41-3667
- Role of standing waves in dynamics of Weddell Sea ice sheet. Seidov, D.G., et al, [1986, p.90-93, eng] 41-3681
- Moving loads on sea ice. Squire, V.A., et al, [1987, p.569-575, eng] 41-3855
- Albedo and heat balance of oil-polluted ice-snow surfaces. Izmailov, V.V., et al, [1986, p.117-120, rus] 41-3869
- Oceanic heat flux through a young sea-ice sheet. Ono, N., et al, [1986, p.37-43, jpn] 41-3878
- Observation of the surface roughness of sea ice using an X-band radar. Aota, M., et al, [1986, p.45-58, jpn] 41-3879
- Observation of internal structure in sea ice by X-ray computed tomography. Kawamura, T., et al, [1986, p.59-67, jpn] 41-3880
- Future satellite systems for oceanic and cryospheric observations. Sherman, J.W., III, [1986, p.257-267, eng] 41-3987
- Generation of unstable modes of the iceward-attenuating swell by ice breeze. Chu, P.C., [1987, p.828-832, eng] 41-3996
- Modelling of continental and sea ice as part of climate models. Nagurnyi, A.P., [1986, 104p., rus] 41-4092
- Modern glacial marine environments. Powell, R.D., [1987, p.23-25, eng] 41-4097
- Newly formed ice gouges in Harrison Bay, Alaska. Reaie, D.M., [1986, 52p., eng] 41-4107
- Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124
- Sea ice structure and mechanical properties. Richter-Menge, J.A., et al, [1987, 30p., eng] 41-4143
- Sea-ice crystal structure and salinity, Hebron Fjord, Labrador. Gow, A.J., [1987, 18p., eng] 41-4144
- Soviet-American field experiment "Weddell-POLEX-81". Sarukhanian, E.I., [1986, p.9-18, rus] 41-4182
- Thermohaline water stratification in the southern ocean from ice cover data. Bagriantsev, N.V., et al, [1986, p.18-27, rus] 41-4183
- Soviet-American expedition "Weddell-POLEX-81", review. Gordon, A.L., [1986, p.27-37, rus] 41-4184
- Meso- and macroscale air-sea interaction processes in the South Atlantic Ocean. Vasil'ev, V.F., et al, [1986, p.62-67, rus] 41-4188
- Small-scale interaction between atmosphere and ocean at Maud Rise. Makhtas, A.P., et al, [1986, p.67-71, rus] 41-4189
- Ice flora in the central part of the Arctic Ocean. Mel'nikov, I.A., [1986, p.59-62, rus] 41-4197
- Diagnostic ice-ocean model. Hibler, W.D., III, et al, [1987, p.987-1015, eng] 41-4208
- Physical properties of summer sea ice in the Fram Strait. Tucker, W.B., et al, [1987, p.6787-6803, eng] 41-4238
- Sea ice morphology in the Fram Strait and Greenland Sea from remote sensing data. Campbell, W.J., et al, [1987, p.6805-6824, eng] 41-4239
- Mapping mesoscale ocean structure within the interior marginal ice zone. Manley, T.O., et al, [1987, p.6837-6842, eng] 41-4241
- Sea ice drift near Bering Strait during 1982. Pease, C.H., et al, [1987, p.7107-7126, eng] 41-4265
- Formation processes of brine drainage channels in sea ice. Wakatsuchi, M., et al, [1987, p.7195-7197, eng] 41-4272
- Winter Ice Experiment Beaufort Sea (WIEBS)—data collection. Neralla, V.R., et al, [1987, p.203-212, eng] 41-4274
- Constitutive law for sea ice and some applications. Hakkinen, S., [1987, p.81-90, eng] 41-4275
- Sea ice salinity and porosity changes during storage. Cox, G.F.N., et al, [1986, p.371-375, eng] 41-4291
- Electromagnetic property trends in sea ice, Part 1. Kovacs, A., et al, [1987, 45p., eng] 41-4368
- Morphology and kinematics of Arctic sea ice. Lee, M., et al, [1987, p.92-96, eng] 41-4442
- Comparison of observed and modeled ice motion in the Arctic Ocean. Zwally, H.J., et al, [1987, p.136-144, eng] 41-4448
- Remote sensing of sea-ice growth and melt, Milne Ice Shelf, Canada. Jeffries, M.O., et al, [1987, p.145-150, eng] 41-4449
- Snowmelt on Arctic sea ice. Scharfen, G., et al, [1987, p.200-205, eng] 41-4458
- Interaction between subtropical high and polar ice in Northern Hemisphere. Fang, Z., [1987, p.330-335, eng] 41-4487
- Modelling of Labrador Sea pack ice, with an application to estimating geostrophic currents. Kelher, T.E., et al, [1987, p.161-176, eng] 41-4493
- Archaeomonad (Chrysophyta) cysts: ecological and paleoecological significance. Mitchell, J.G., et al, [1986, p.289-298, eng] 41-4609
- Sea ice distribution**
- Ice balance and ice resources of the world ocean. Lebedev, A.A., [1986, p.112-118, rus] 41-117
- Ice on northern seas and wind in equatorial stratosphere. Sheremet'evskaya, O.I., [1986, p.128-131, rus] 41-120
- Nature of winter ruptures in sea ice covers. Gorbunov, I.U.A., et al, [1986, p.131-134, rus] 41-121
- Canadian East Coast Workshop on Sea Ice, 1986. [1986, 668p., eng] 41-142
- Northern Hemisphere sea ice variability: observed and simulated. Walsh, J.E., [1986, p.3-20, eng] 41-143
- On the sea ice budget of the Greenland Sea. Moritz, R.E., [1986, p.21-58, eng] 41-144
- Sea ice conditions in the Labrador Sea-Grand Banks area. Zakrzewski, W.P., [1986, p.60-87, eng] 41-145
- Sea ice distribution over the N.E. Newfoundland Shelf. Symonds, G., [1986, p.88-114, eng] 41-146
- Buoyancy flux-driven cyclonic gyre in the Labrador Sea. Seung, Y.-H., [1986, p.115-161, eng] 41-147
- Large-scale ice-ocean modeling. Hibler, W.D., III, [1986, p.165-184, eng] 41-148
- Numerical study of sea ice and ocean circulation in the Arctic. Semtner, A.J., Jr., [1986, p.189-224, eng] 41-149
- Iceberg severity revisited. Marko, J.R., et al, [1986, p.413-428, eng] 41-157
- NOAA AVHRR digital data for sea ice analysis. Ramsay, B.R., et al, [1986, p.495-508, eng] 41-161
- Sea ice concentration and ice edge position using remote sensing. Williams, D.R.P., [1986, p.526-536, eng] 41-163
- Ice and ice management on the Grand Bank. Ransom, J.A.N., et al, [1986, p.561-582, eng] 41-167
- Ice monitoring and forecasting for the Beaufort Sea. Eley, F.J., [1986, p.598-614, eng] 41-169
- Dome-Canmar's operational ice-forecasting system for the Beaufort Sea. Steen, J.W., et al, [1986, p.615-650, eng] 41-170
- Cryospheric data management system for special sensor microwave imager DMSP data. Weaver, R., et al, [1985, p.411-415, eng] 41-219
- Ice management on the Grand Banks. Hotzel, I.S., et al, [1985, p.416-419, eng] 41-220
- NORDA Arctic data collection, processing, and interpretation capabilities. Eppler, D.T., et al, [1985, 21p., eng] 41-243
- Improving the display of marine radar returns from first year sea ice. Klein, K., et al, [1986, 75p., eng] 41-244
- Sea ice over the Icelandic coasts, Oct. 1983-Sep. 1985. [1985, 43p., ice] 41-246
- Sea ice fields in the Barents Sea. Vinje, T.E., [1985, 4p. + map, eng] 41-247

## Sea ice distribution (cont.)

- Bibliography on the fate and effects of arctic marine oil pollution. Young, S.C., ed, [1986, 212p., eng] 41-270
- Icebreakers: fuel economy and safe navigation. Bereznil, V., [1986, p.35-36, rus] 41-436
- Compendium of Arctic environmental information. Welsh, J.P., et al, [1986, 142p., eng] 41-483
- Seas of the World Ocean. Sukhovet, V.F., [1986, 288p., rus] 41-556
- Glaciology and climatology of the North Water polynya, Baffin Bay. Muller, F., et al, [1976, 128p., eng] 41-606
- Remote sensing of sea ice by complex radar-radiometric methods. Gavrilenko, A.S., et al, [1986, p.130-134, rus] 41-706
- Interpreting satellite scanning images of medium resolution for studying ice conditions in the Baltic Sea. Drabkin, V.V., [1986, p.223-227, rus] 41-707
- Mapping edge of sea ice, Ellesmere Island, N.W.T. Jeffries, M.O., et al, [1986, p.96-99, eng] 41-747
- Ice drift tracing of water circulation in the Arctic. Kuz'mina, N.P., et al, [1984, p.20-32, eng] 41-818
- Computation of ice cover thermal emission. Brekhovskikh, V.L., [1985, p.574-581, eng] 41-822
- Remote sensing of the Bering Sea ice cover. Cavalieri, D.J., et al, [1986, p.368-377, eng] 41-833
- Microwave observations of sea ice in the Bering and Greenland Seas. Grenfell, T.C., [1986, p.378-382, eng] 41-834
- SAR for real-time ice reconnaissance. Nichols, A.D., et al, [1986, p.383-389, eng] 41-835
- Ice air interaction theory for migration of marginal ice zone. Chu, P.C., [1986, p.863-883, eng] 41-869
- Canadian sea ice information system CSIS: an online computer database for sea ice and iceberg data. Whittick, J.A., et al, [1986, p.119-124, eng] 41-969
- Sea ice concentration from AVHRR imagery. Yamanouchi, T., et al, [1986, p.89-102, eng] 41-979
- Seasonal ice extent on the northeast Newfoundland Shelf. Symonds, G., [1986, p.10,718-10,724, eng] 41-1011
- Water masses and circulation of the southern ocean. Sarukhanian, E.I., et al, [1986, 288p., rus] 41-1013
- Effect of mass balance changes on fluctuations of an ice sheet interacting with the sea. Petrov, V.N., et al, [1986, p.131-136, 247-250, eng] 41-1068
- Effectiveness of thermal viewing equipment for ice surveying. Ovsiannikov, V.A., [1985, p.82-83, rus] 41-1406
- Sea ice measurements at Davis Station. Zhang, Q., [1986, p.143-148, chi] 41-1461
- Summer 1979: ice climatology of the Canadian Arctic. Dey, B., [1985, p.25-33, eng] 41-1481
- Protection of structures from pressure of moving sea ice. Ice tests performed at the "Kemi I" lighthouse. [1985, p.19, rus] 41-1514
- East Greenland Current—ice studies. Tryde, P., [1986, p.129-136, eng] 41-1588
- Sea ice modelling in the East Greenland area. Larsen, J., et al, [1986, p.147-156, eng] 41-1590
- New direction in the Arctic ice navigation research. Buznev, A.I.A., et al, [1986, p.176-178, rus] 41-1665
- Studying anomalously high ice drift velocities in Arctic seas. Kuznetsov, I.M., et al, [1986, p.57-60, eng] 41-1691
- Study of ice covers by radiophysical means from aerospace platforms. Efimov, V.B., et al, [1985, p.394-399, eng] 41-1892
- Exogenic relief formation in the Far East. Skrylnik, G.P., ed, [1985, 155p., rus] 41-1908
- Quantitative evaluation of the role of near-shore ice in shoreline modification in the Okhotsk Sea. Stepanova, L.E., [1985, p.90-98, rus] 41-1909
- Ice in the Azov Sea. Fomicheva, L.A., [1986, p.3-10, rus] 41-1970
- Possible CO<sub>2</sub>-induced warming effects on the cryosphere. Barry, R.G., [1984, p.571-604, eng] 41-1973
- Icebreaking operations in McMurdo Sound, Antarctica. Wubbold, J.H., [1986, p.523-530, eng] 41-2043
- Modification of polar ice forecast subsystem—Arctic. Harr, P.A., et al, [1981, 20p., eng] 41-2191
- Determining sea ice physical parameters from remotely sensed microwave data in the 0.3-18 cm band. Raizer, V.I.U., et al, [1986, p.29-42, eng] 41-2207
- Ice surveillance by satellite. Thompson, T., [1986, p.179-186, eng] 41-2273
- Extracting sea ice data from satellite SAR imagery. Fily, M., et al, [1986, p.849-854, eng] 41-2299
- Users manual for a polar ice forecast subsystem—Arctic. Harr, P.A., [1981, 18p., eng] 41-2328
- Antarctic ice charts 1983-1984. [1985, 125p., eng] 41-2337
- Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al, [1986, 63p., rus] 41-2362
- Forecasting summer ice conditions in the Beaufort Sea. Pritchard, R.S., et al, [1987, p.371-377, eng] 41-2445
- Sea ice off the Icelandic coasts, Oct. 1985-Sept. 1986. [1986, 32p., ice] 41-2490
- Arctic sea ice extent and drift, modeled as a viscous fluid. Ling, C.-H., et al, [1986, p.71-98, eng] 41-2577
- Canadian inland seas. Martini, I.P., ed, [1986, 494p., eng] 41-2591
- Physical oceanography of Hudson Strait and Ungava Bay. Drinkwater, K.F., [1986, p.237-264, eng] 41-2596
- Forecasting ice thickness and concentration in the Arctic. Preller, R.H., et al, [1986, p.155-164, eng] 41-2657
- Sea ice forecasting. Benner, D.A., [1986, p.193-206, eng] 41-2659
- Ice cover thickness measurements in the Arctic Ocean. McLaren, A.S., et al, [1986, p.225-235, eng] 41-2661
- Variability of Arctic sea ice drafts. Tucker, W.B., et al, [1986, p.237-256, eng] 41-2662
- Hydraulic construction in ports and engineering research in coastal zones of seas. Kostikov, V.D., ed, [1986, 169p., rus] 41-2709
- Interaction of pressure ridges with cylindrical supports of hydraulic structures. Belov, A.B., et al, [1986, p.34-37, rus] 41-2710
- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, [1986, 160p., rus] 41-2714
- Scientific problems and basic results of the "Kosmos-1500" experiment. Afanas'ev, I.U.A., et al, [1986, p.4-20, rus] 41-2715
- Digital processing of radar images obtained from the satellite "Kosmos-1500". Asmus, V.V., et al, [1986, p.37-57, rus] 41-2716
- Cluster analysis of airborne-radar images of ice covers. Asmus, V.V., et al, [1986, p.64-72, rus] 41-2718
- Characteristics of radar echoes from sea ice. Nikitin, P.A., [1986, p.85-92, rus] 41-2719
- Calculating meteorological elements over the Okhotsk Sea. Petrov, A.G., [1986, p.3-9, rus] 41-2721
- Ice dynamics in the Weddell Sea, 1980. Golosov, V.V., [1986, p.103-108, rus] 41-2723
- Iceberg sightings during SIBEX-2, Chile, in Bransfield Strait, 1985. Schlatter, R.P., [1986, p.89-93, spa] 41-2812
- Geophysics of sea ice. [1986, 1196p., eng] 41-2985
- Geophysics of sea ice: overview. Untersteiner, N., [1986, p.1-8, eng] 41-2986
- Ice thickness distribution—measurement and theory. Rothrock, D.A., [1986, p.551-575, eng] 41-2994
- Diagnostic studies of large-scale air-sea-ice interactions. Walsh, J.E., [1986, p.755-784, eng] 41-2998
- Stochastic description of atmosphere-sea ice-ocean interaction. Lemke, P., [1986, p.785-823, eng] 41-2999
- Seasonal ice zone. Wadhams, P., [1986, p.825-991, eng] 41-3000
- Aspects of the meteorology of the seasonal sea ice zone. Barry, R.G., [1986, p.993-1020, eng] 41-3001
- Remote sensing as a research tool. Carsey, F.D., et al, [1986, p.1021-1098, eng] 41-3002
- Sea ice data base. Barry, R.G., [1986, p.1099-1134, eng] 41-3003
- First time above the North Pole. Stromilov, N.N., [1986, 134p., rus] 41-3014
- Sea ice thickness distribution in the Arctic Ocean. Bourke, R.H., et al, [1987, p.259-280, eng] 41-3037
- MIZEX—a program for mesoscale air-ice-ocean interaction experiments in Arctic marginal ice zones. MIZEX bulletin 7. [1986, 88p., eng] 41-3052
- Sea ice dynamics. Mathematical models. Timokhov, L.A., et al, [1987, 272p., rus] 41-3145
- Wave growth in scattered sea-ice. Masson, D., et al, [1987, p.257-266, eng] 41-3167
- Ocean-atmosphere interactions and climatic changes in Northern Hemisphere. Nikolaev, I.U.V., ed, [1986, 163p., eng] 41-3262
- Results of modeling high latitude climates. Nagurnyi, A.P., [1986, p.21-32, eng] 41-3263
- Results of modeling high latitude climates. Nagurnyi, A.P., [1986, p.21-32, eng] 41-3263
- Studies of ice-edge zones of Arctic seas. Nikolaev, I.U.V., et al, [1986, p.131-138, eng] 41-3264
- Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship. Makshas, A.P., et al, [1986, p.139-145, eng] 41-3265
- Quantitative estimates of the mass flux and ice movement along the ice edges in the eastern and southern Weddell Sea. Lange, M.A., [1987, p.57-74, eng] 41-3274
- Spaceborne SAR and sea ice: a status report. Weeks, W.F., [1983, p.113-115, eng] 41-3347
- Sea ice geophysical problems. Carsey, F.D., [1983, p.116-117, eng] 41-3348
- Determining some characteristics of fast and drifting ice with the meteorological radar-2 station. Komarov, A.V., et al, [1985, p.66-70, rus] 41-3430
- Influence of reflections from atmospheric precipitation on the characteristics of radar images of sea ice. Aleksandrov, V.I.U., [1985, p.70-76, eng] 41-3431
- Sea ice distribution off Okhotsk Sea coast of Hokkaido. Jan.-Apr. 1986. Aota, M., et al, [1986, p.25-50, jpn] 41-3504
- Isotopes in the hydrosphere (Summaries of reports presented at the 2nd All-Union symposium, Kamenets-Podolskiy, May 27-31, 1985). Dubinchuk, V.T., ed, [1985, 259p., rus] 41-3534
- Problems in automation of geophysical investigations. Collection of works. Deviatits'nyi, A.S., ed, [1985, 162p., rus] 41-3543
- Classification of sea ice according to structural characteristics. Aleksanina, M.G., [1985, p.52-58, rus] 41-3544
- Sea ice in the 1985/86 winter on the coast between Ems and Trave Rivers. Koslowski, G., [1986, p.207-215, ger] 41-3558
- Ice balance of the world's oceans. Lebedev, A.A., [1986, p.322-330, eng] 41-3624
- Sea ice concentration assessed from aerospace imagery. Aleksandrov, V.I.U., et al, [1987, p.181-189, eng] 41-3626
- Exploitation of antarctic minerals. Crockett, R.N., et al, [1987, p.121-132, eng] 41-3741
- Sea ice ridges in the Gulf of Bothnia. Zakrzewski, W.P., [1986, p.131-144, eng] 41-3759
- Design margins for icebreakers. Nikolaev, V., [1987, p.42-45, rus] 41-3793
- Reserved zones of Franz Josef Land. Uspenski, S.M., et al, [1986, p.7-18, rus] 41-3861
- Climate of Antarctica. Papers presented at the All-Union Symposium on the Study of the Climate of Antarctica. Dolgin, I.M., ed, [1986, 213p., eng] 41-3948
- Thermobaric and ice conditions, South Orkney region. Petrov, L.S., et al, [1986, p.59-65, eng] 41-3950
- Winter climatic conditions in the Somov Sea. Petrov, L.S., et al, [1986, p.72-79, eng] 41-3951
- Humidity of air in Antarctica. Zav'ialova, I.N., [1986, p.92-101, eng] 41-3953
- Satellite passive microwave ice maps. Thirkettle, F.W., [1986, p.939-945, eng] 41-3989
- Computer-assisted techniques for sea ice data. Burns, B.A., et al, [1986, p.947-959, eng] 41-3990
- Nimbus-7 microwave radiometry of ocean surface winds and sea ice. Rubinstein, I.G., et al, [1986, p.961-970, eng] 41-3991
- Polynucleate hydrocarbon concentrations from oil spilled in seawater. Ventajas, L., [1986, 15p., spa] 41-3999
- Sea ice features using side-looking radar and Landsat imagery. Barnes, J.C., et al, [1981, 66p., eng] 41-4158
- Observation of sea ice using the 36-GHz surface contour radar. Fedor, L.S., et al, [1987, p.393-402, eng] 41-4174
- Soviet-Arctic field experiment "Weddell-POLEX-81". Sarukhanian, E.I., [1986, p.9-18, rus] 41-4182
- Ice conditions in the "Weddell-POLEX-81" study area. Chugul, I.V., [1986, p.37-41, rus] 41-4185
- Ice conditions during the Mikhail Somov cruise in a Soviet antarctic expedition. Proshutinski, A.I.U., et al, [1986, p.75-78, rus] 41-4190
- Estimate of number of icebergs in the southern ocean. Bagriantsev, N.V., et al, [1986, p.85-87, rus] 41-4191
- Ice process development. Romanov, A.A., [1986, p.28-35, rus] 41-4193
- Ice distribution in Arctic seas of the North American shelf. Smirnov, V.I., [1986, p.35-40, rus] 41-4194
- Basic components of chemical balance of the Arctic Ocean. Rusanov, V.P., [1986, p.40-51, rus] 41-4195
- Modeling ice cover evolution and ice redistribution. Appel, I.L., et al, [1986, p.71-77, rus] 41-4198
- Ice movement according to the FGGE buoys. Losev, S.M., et al, [1986, p.77-88, rus] 41-4199
- Amount of ice and heat required for its melting in the Far Eastern seas of the USSR. Iakunin, I.P., [1986, p.93-96, rus] 41-4201
- Ice movement in the Arctic Ocean according to the FGGE Buoys. Gorbunov, I.U.A., et al, [1986, p.96-103, rus] 41-4202
- Ice cover effect on surface and internal gravity waves. Savchenko, V.G., [1986, p.103-110, rus] 41-4203
- Disturbances of the continuity of sea-ice covers in winter. Gorbunov, I.U.A., et al, [1986, p.110-116, rus] 41-4204
- Circulation and water masses of the East Greenland shelf. Bourke, R.H., et al, [1987, p.6729-6740, eng] 41-4233
- Microwave sea ice signatures in the marginal ice zone. Onstott, R.G., et al, [1987, p.6825-6835, eng] 41-4240
- Boundary layer, upper ocean, and ice observations in the Greenland Sea marginal ice zone. Morison, J.H., et al, [1987, p.6987-7011, eng] 41-4255
- Role of shortwave radiation in the summer decay of a sea ice cover. Maykut, G.A., et al, [1987, p.7032-7044, eng] 41-4258
- Size of wind-driven coastal polynyas. Pease, C.H., [1987, p.7049-7059, eng] 41-4260
- On the relationship between atmospheric circulation and the fluctuations in the sea ice extents of the Bering and Okhotsk seas. Cavalieri, D.J., et al, [1987, p.7141-7162, eng] 41-4267
- Shuttle Imaging Radar B Weddell Sea ice observations. Martin, S., et al, [1987, p.7173-7179, eng] 41-4269
- Ice conditions of an arctic polynya: North Water in winter. Steffen, K., [1986, p.383-390, eng] 41-4293
- Oceanographic influences on the sea ice cover in the Sea of Okhotsk. Gratz, A.J., et al, [1981, 18p., eng] 41-4327
- Seasonal variations of east antarctic sea ice. Jacka, T.H., et al, [1987, p.85-91, eng] 41-4441
- Sea ice variations in the Northern Hemisphere, 1974. Parkinson, C.L., et al, [1987, p.119-126, eng] 41-4446

- Effect of divergence on ice redistribution in the Arctic Ocean, revealed by space imagery analysis. Nazirov, M., [1987, p.30-36, rus] 41-4618
- Estimating the effect of atmospheric precipitation on sea-ice radar images. Aleksandrov, V.I.U., [1987, p.37-43, rus] 41-4619
- Determining the velocity of sea-surface wind from radar data of the *KOSMOS-1500* satellite. Vol'pian, G.V., et al, [1987, p.3-11, rus] 41-4620
- Sea level**
- Global ice-sheet system interlocked by sea level. Denton, G.H., et al, [1986, p.3-26, eng] 41-611
- West Antarctic ice sheet dynamics. Van der Veen, C.J., [1985, p.732-734, eng] 41-983
- Latest Miocene delta O-18 changes, ice volume and sea level. Hodell, D.A., et al, [1986, p.411-414, eng] 41-1174
- Pliocene variations of Antarctic Convergence in southwest Atlantic. Ciesielski, P.F., et al, [1986, p.197-232, eng] 41-1264
- Antarctic ice sheet configuration 30 deg E to 80 deg E. Shibuya, K., et al, [1986, p.1-12, eng] 41-1469
- Polar ice sheets: a wild card in the deck. Jacobs, S.S., [1986, p.50-54, eng] 41-1900
- Arctic shelf in the late Pleistocene and certain problems of paleogeology. Vozovik, I.U.I., [1986, p.449-452, eng] 41-2572
- Modelling the response of the West Antarctic Ice Sheet to a climatic warming. Budd, W.F., et al, [1987, p.321-358, eng] 41-3287
- Inception, growth and decay of the Laurentide Ice Sheet. Andrews, J.T., et al, [1987, p.13-15, eng] 41-4096
- Rising sea level and collapsing antarctic ice. Hughes, T.J., [1987, p.89-100, eng] 41-4099
- Sea spray**
- Polar technology—ice engineering. [1986, c10p., eng] 41-268
- Adhesion and physical properties of sea spray ice. Sackinger, W.M., et al, [1986, p.81-89, eng] 41-368
- Spray-ice islands evaluated for Arctic-drilling structures. Juvkam-Wold, H.C., [1986, p.57-66, eng] 41-646
- Sea spray icing: a review of current models. Ackley, S.F., [1986, p.239-262, eng] 41-936
- Spray ice bonding to superstructure coatings. Sackinger, W.M., [1986, p.453-455, eng] 41-948
- Modeling of spray ice accretion experiments. Sackinger, W.M., [1986, p.487-491, eng] 41-952
- Sea spray icing on marine units. Jørgensen, T.S., [1986, p.447-470, eng] 41-1112
- Adhesive strength of spray accreted ice on materials and coatings. Lyyra, M., et al, [1986, p.484-496, eng] 41-1114
- Prediction of vessel icing. Overland, J.E., et al, [1986, p.1793-1806, eng] 41-2845
- Spray ice: a menace to mariners. Freeman, K., [1987, p.11-13, 39, eng] 41-3412
- Splashing a ship with collision-generated spray. Zakrzewski, W.P., [1987, p.65-83, eng] 41-4217
- Study of sea-spray icing of communications antennas—exploratory (NSAP project Q-5-79). [1981, 43p. + append., eng] 41-4636
- Sea states**
- Four-element CODAR beam forming. Jeans, P.K., et al, [1986, p.296-303, eng] 41-4179
- Sea transportation**
- See: Marine transportation
- Sea water**
- Temperature, salinity and density profiles around icebergs in the Labrador Sea. Pearson, D.E., [1986, p.472-491, eng] 41-160
- Monitoring seasonal changes in seafloor temperature and salinity. Sellmann, P.V., et al, [1986, p.110-114, eng] 41-369
- Biogenic silica accumulation in the Ross Sea. Ledford-Hoffman, P.A., et al, [1986, p.2099-2110, eng] 41-458
- Reports of US/USSR Weddell Polynya Expedition, Vol.8. Ackley, S.F., ed, [1986, 158p., eng] 41-460
- Method for growing large single crystals of sea ice. Kawamura, T., [1986, p.320-303, eng] 41-691
- OTH radar measurement of sea and ice backscatter reflectivity. Ring, W.F., et al, [1982, 15p., eng] 41-1758
- Outfall mixing design in shallow coastal water under Arctic ice cover. Jirka, G.H., et al, [1985, p.856-862, eng] 41-1913
- Deflation of salts from ice surface in the Aral Sea. Tsytarín, A.G., [1986, p.62-69, rus] 41-1971
- Sea-water freezing equipment and technique for producing artificial ice. Gagarin, V.E., et al, [1986, p.172-176, rus] 41-2173
- Ice-seawater turbulent boundary layer interaction with melting or freezing. Mellor, G.L., et al, [1986, p.1829-1846, eng] 41-2219
- Sea water density and submarine operation in the Arctic. Frost, M.E., [1986, p.1-30, eng] 41-2653
- Canadian Beaufort: a corrosive extreme. Lingnau, D.G., [1986, p.45-51, eng] 41-2740
- Antarctic ice rafting debris and sediments. Anderson, J.B., [1986, p.503-505, eng] 41-2800
- Satellite based sea surface temperature determination. Walton, C., [1987, 58p., eng] 41-3570
- Water masses and currents of the southern ocean. Whitworth, T., III, et al, [1987, p.6462-6476, eng] 41-3641
- Basic components of chemical balance of the Arctic Ocean. Rusanov, V.P., [1986, p.40-51, rus] 41-4195
- Current regimes across the East Greenland polar front, summer 1984. Manley, T.O., et al, [1987, p.6741-6753, eng] 41-4234
- Oil motion during lead closure. MacNeill, M.R., et al, [1987, 13p., eng] 41-4529
- Mass balance of the Arctic Ocean. Rudels, B., [1987, 53p., eng] 41-4599
- Sea water freezing**
- Studying the technology of building moorings of sea-water ice. Ivanova, E.L., [1986, p.92-94, rus] 41-2161
- Conditions of upbuilding and properties of artificial sea-water ice. Gagarin, V.E., et al, [1986, p.140-146, rus] 41-2167
- Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al, [1986, 63p., rus] 41-2362
- Calculating meteorological elements over the Okhotsk Sea. Petrov, A.G., [1986, p.3-9, rus] 41-2721
- Different domains of application of cold. Manual. Bykov, A.V., ed, [1985, 271p. (Pertinent p.: 42-66, 99-125, 222-260), rus] 41-3154
- Natural associations of the Arctic and their protection. Korotkevich, E.S., ed, [1986, 120p., rus] 41-3860
- Albedo and heat balance of oil-polluted ice-snow surfaces. Izmailov, V.V., et al, [1986, p.117-120, rus] 41-3869
- Sea waves**
- See: Ocean waves
- Sealing**
- Frost-resistant fluoroplastic seals for arctic machinery. Popov, S.N., et al, [1986, p.933-951, eng] 41-1139
- Use of "Five-Minute Epoxy" as a cryogenic leak sealant. Martin, D.L., [1987, p.314-315, eng] 41-2469
- High-vacuum seal for low temperatures. Dubovitskiĭ, I.U.A., et al, [1987, p.950-951, eng] 41-3158
- Crack sealing compounds in winter. Lupien, C., et al, [1987, p.689-718, eng] 41-4040
- Making concrete dams monolithic by cementing structural joints. Argal, E.S., [1987, 119p., rus] 41-4150
- Seasonal freeze thaw**
- Foundation construction on frost-heaving ground (collection of summaries of papers and reports to be presented at the regional conference "Effective foundations for low-rise buildings on frost heaving ground in the Far East and Transbaikalia, Chita, Nov. 21-22, 1985). Sal'nikov, P.I., ed, [1985, 119p., rus] 41-276
- Allowing for frost-effect on soils in foundation design. Sal'nikov, P.I., [1985, p.11-13, rus] 41-278
- Pile foundations for buildings on deep freezing ground. Moiseichik, E.K., [1985, p.22-23, rus] 41-284
- Interaction of shallow foundations with underlying seasonally freezing layers. Fursov, V.V., [1985, p.57-59, rus] 41-304
- Artificial freezing of ground between permafrost and the active layer. Aleksandrov, I.U.A., [1986, p.7-8, rus] 41-911
- Frost penetration effect on blasting parameters of seasonally freezing ground. Frash, G.B., et al, [1986, p.55-59, rus] 41-2142
- Cryogenic deformations in reclaimed lands of the Khanka plain. Rai'ko, V.D., [1986, p.160-162, rus] 41-2251
- Kologriv forest (ecological investigations). Sokolov, V.E., ed, [1986, 126p., rus] 41-2345
- On cryogenic formations. Kaplina, T.N., [1986, p.3-14, rus] 41-2814
- On the least resistance line of curvilinear blow-out charges detonated in permafrost. Afanas'ev, E.M., et al, [1986, p.61-66, rus] 41-2906
- Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains. Severskiĭ, I.V., et al, [1986, p.29-38, rus] 41-3484
- Differentiations of seasonally and perennially frozen rocks in Severnoe Priamur'e. Pozdniakov, I.V., [1986, p.96-106, rus] 41-3490
- Ground water formation in southern Tyumen' region. Solobova, L.A., [1987, p.131-136, rus] 41-3651
- Interactions between "cold" gas pipelines and freezing ground. Mironov, N.G., et al, [1986, p.42-43, rus] 41-3976
- Biologic activities in forest soils of the Angara-Yenisey region. Sorokin, N.D., et al, [1985, p.35-47, rus] 41-4110
- See also: Freeze thaw cycles
- Seasonal thaw layer**
- See: Active layer; Thaw depth
- Seasonal variations**
- Meteorology and climatology of snow avalanches in Montana. Butler, D.R., [1986, p.72-87, eng] 41-73
- Aerosol measurements at the South Pole. Bodhaine, B.A., et al, [1986, p.223-235, eng] 41-1753
- Antarctic ice charts 1983-1984. [1985, 125p., eng] 41-2337
- Phytoplankton in marine sediments of Frobisher Bay. Hsiao, S.I.C., [1987, p.245-251, eng] 41-3685
- Influence of natural environments on economic development of the North. Okisheva, L.N., [1986, p.17-19, rus] 41-4062
- Seasonal variations of east antarctic sea ice. Jacka, T.H., et al, [1987, p.85-91, eng] 41-4441
- Sediment transport**
- Size distribution of surficial bed material during a snowmelt flood. Andrews, E.D., et al, [1986, p.191-197, eng] 41-211
- Research priorities in Canadian waters. Goddins, D.O., [1986, p.295-332, eng] 41-251
- Sea ice breakup and tidal flats processes, Frobisher Bay, Baffin Island. McCann, S.B., et al, [1986, p.168-180, eng] 41-362
- Glaciers and sediment. Bezing, A., et al, [1986, p.53-69, eng] 41-474
- Engineering analysis of beach erosion at Homer Spit, Alaska. Smith, O.P., et al, [1985, 29p. + 5 append., eng] 41-528
- Debris-influenced sliding laws and basal debris balance. Shoemaker, E.M., [1986, p.224-231, eng] 41-682
- Some observations on subglacial ground-water flow. Smart, C.C., [1986, p.224-231, eng] 41-683
- Final report on freezeup studies, RU 205. [1986, var.p., eng] 41-1208
- Anchor ice and bottom-freezing in marine sedimentary environments. Reimnitz, E., et al, [1986, 21p., eng] 41-1209
- Flume studies and field observations of the interaction of frazil ice and anchor ice with sediment. Kempema, E.W., et al, [1986, 48p., eng] 41-1210
- Slush ice as a geologic agent. Reimnitz, E., et al, [1986, 19p., eng] 41-1211
- Eolian processes in glaciers, SW Spitsbergen. Kida, J., [1986, p.25-43, eng] 41-1550
- Features of the Sagavanirktok River, Alaska. Hodel, K.L., [1986, 28p., eng] 41-1895
- Exogenic relief formation in the Far East. Skrylnik, G.P., ed, [1985, 155p., rus] 41-1908
- Quantitative evaluation of the role of near-shore ice in shoreline modification in the Okhotsk Sea. Stepanova, L.E., [1985, p.90-98, rus] 41-1909
- Low-temperature effects on flow in sand-bed streams. Lau, Y.L., [1987, p.111-115, eng] 41-2067
- Mineralogic distribution of the sand fraction due to ice drifting. Drapeau, G., et al, [1985, p.51-56, fre] 41-2286
- Morphology, hydraulics and sediment transport of an ice-covered river. Lawson, D.E., et al, [1986, 37p., eng] 41-2612
- Vertical sediment flux beneath annual sea ice, McMurdo Sound, Antarctica. Dunbar, R.B., et al, [1985, p.109-111, eng] 41-2950
- Nearshore sediment dynamics—Beaufort Sea. The 1986 monitoring program. Hodgins, D.O., et al, [1986, 195p., eng] 41-3030
- Relict ice scours on King William Island, N.W.T. Woodworth-Lynas, C.M.T., et al, [1986, p.64-72, eng] 41-3093
- Preliminary simulation of the formation and infilling of sea ice gouges. Weeks, W.F., et al, [1986, p.259-268, eng] 41-3118
- Glacio-fluvial sediment transfer. Gurnell, A.M., ed, [1987, 524p., eng] 41-3124
- Boundary layer measurements and sand transport prediction, Scotian shelf. Hodgins, D.O., et al, [1986, 114p. + append., eng] 41-3189
- Study of the nature and incidence of density currents in a shallow glacial lake. Weirich, F.H., [1986, p.396-413, eng] 41-3786
- Sediment transport in the Susitna River basin, Alaska, 1983-1984. Knott, J.M., et al, [1986, 73p., eng] 41-4323
- Sedimentation**
- Problems of studying sediment balance in coastal zones of seas. Shulskiĭ, I.U.D., [1986, 240p., rus] 41-516
- 1985 field studies, Beaufort and Chukchi Seas, conducted from the NOAA ship *Discoverer*. Miley, J.M., ed, [1986, 57p. + figs., eng] 41-831
- Limestone formation in periglacial and glacial areas. Chrobok, S.M., [1986, p.277-284, ger] 41-1565
- Sedimentation at the foot of volcanoes in various climatic settings. Kuralenko, N.P., [1986, 111p., rus] 41-2363
- Influence of neotectonics on the development of cryogenic formations. Sukhov, A.G., et al, [1986, p.103-115, rus] 41-2826
- Landforms and sediments produced by glaciers in Iceland. Sharp, M.J., [1982, 380p. + append., eng] 41-3141
- Sedimentation in a glacier lake. Östrem, G., et al, [1987, p.123-138, eng] 41-3556
- Origin of ice-bearing Edoma-complex loess. Kiselev, S.V., et al, [1987, p.113-119, rus] 41-3771
- Modern glaciomarine environments. Powell, R.D., [1987, p.23-25, eng] 41-4097
- Processes of glaciomarine sedimentation. Dowdeswell, J.A., [1987, p.52-90, eng] 41-4132
- Micropaleontology and sedimentology of Prudhoe Bay. McDougall, K., et al, [1986, 62p. + 14 plates, eng] 41-4600
- Sediments**
- Injection ice formation during subaqueous freezing of sediments. Gravis, G.F., [1986, p.108-112, rus] 41-116

**Sediments (cont.)**

Late Pleistocene sedimentation processes on the antarctic continental shelf. Grobe, H., [1986, 121p. + figs., ger] **41-267**

Biogenic silica accumulation in the Ross Sea. Ledford-Hoffman, P.A., et al, [1986, p.2099-2110, eng] **41-458**

Effect of till rheology on the flow and profile of the Laurentide ice sheet, USA. Beget, J.E., [1986, p.235-241, eng] **41-684**

Avalanche on Mont Canigou, Pyrenees, 1986. Agüera, J.M., et al, [1986, p.13-24, fre] **41-870**

Understanding the Arctic sea floor for engineering. [1982, 141p., eng] **41-893**

Arctic-alpine soils, southern Norway. Mellor, A., [1986, p.327-336, eng] **41-1180**

Sediments in a tidewater glacier, Baffin I., Canada. Dowdeswell, J.A., [1986, p.45-56, eng] **41-1187**

Use of lacustrine sedimentary sequences as indicators of Holocene glacial history, Banff National Park, Alberta, Canada. Leonard, E.M., [1986, p.218-231, eng] **41-1191**

Dating slope deposits and estimating rates of rock wall retreat in Northwest Spitzbergen by lichenometry. André, M.F., [1986, p.65-75, eng] **41-1846**

Thermooxidation of frozen sediment under wave action. Kobayashi, N., et al, [1986, p.140-158, eng] **41-2016**

Coastal features of Canadian inland seas. Martini, I.P., [1986, p.117-142, eng] **41-2594**

Amundsen Sea sediment coring. Kellogg, T.B., et al, [1985, p.79-81, eng] **41-2635**

Trace elements in the Greenland Ice Cap melt zone. Chevallier, P., et al, [1987, p.E649-E656, eng] **41-2728**

Antarctic ice rafting debris and sediments. Anderson, J.B., [1986, p.503-505, eng] **41-2800**

Modern sediments of the Terra Nova Bay polynya. Hughes, P., et al, [1985, p.107-108, eng] **41-2949**

Engineering geology of the Government Hill area, Anchorage, Alaska. Updike, R.G., et al, [1986, 32p., eng] **41-3224**

Gelifluction lobe at Jotunheimen, Norway. Matthews, J.A., et al, [1986, p.345-360, eng] **41-3565**

Channel processes, changes, and sediments in a proglacial braided river. Ashworth, P.J., et al, [1986, p.361-371, eng] **41-3566**

Sedimentary deposits in the northern lowland plains, Mars. Lucchitta, B.K., et al, [1986, p.E166-E174, eng] **41-3749**

Morphosedimentary zones in the Bluenose Lake region, District of Mackenzie. St-Onge, D.A., et al, [1987, p.89-100, eng] **41-4010**

Terrace scarp wind erosion in Arctic East Greenland. Swett, K., et al, [1987, p.45-52, eng] **41-4224**

See also: Bottom sediment; Lacustrine deposits; Marine deposits; Quaternary deposits; Suspended sediments

**Seepage**  
Plot measurements of snowmelt runoff for varying soil conditions. Kane, D.L., et al, [1984, p.123-135, eng] **41-3320**

Experimental investigations of heat-mass transfer coefficients in macroporous media. Mukhedinov, N.A., [1986, p.119-127, rus] **41-3455**

Numerical evaluation of the effect of hydrometeorological factors on the formation of water reserves in soil. Zaretskii, I.U.A., et al, [1986, p.46-56, rus] **41-3587**

Using a model of capillary porous body for calculating water seepage into soil. Golitsina, E.F., et al, [1986, p.108-116, rus] **41-3589**

Micropollutant behavior in karst water systems during snowmelt. Simmlait, N., et al, [1987, p.79-95, eng] **41-3965**

Micropollutant behavior in karst water: karst filtration capacity. Simmlait, N., et al, [1987, p.97-109, eng] **41-3966**

Salt transfer from soil to snow. Kazantsev, V.A., [1984, p.151-155, rus] **41-4091**

See also: Permeability

**Seismic prospecting**  
Avalanche forecasting tests near Innsbruck. Lackinger, B., [1986, p.79-87, ger] **41-3528**

**Seismic reflection**  
Saturated porous layer beneath active ice stream. Blankenship, D.D., et al, [1986, p.54-57, eng] **41-1779**

Seismic survey of the Arctic island channels using open water leads. Sonnichsen, G.V., et al, [1987, p.877-882, eng] **41-4015**

**Seismic refraction**  
Detection of high altitude permafrost, Jotunheimen, Norway. Harris, C., et al, [1986, p.19-26, eng] **41-1184**

Seismic bedrock depth measurements and the origin of George VI Sound, Antarctic Peninsula. Maslany, M.P., [1987, p.51-65, eng] **41-3811**

**Seismic surveys**  
Science program of the FRAM experiments in the Eastern Arctic Ocean. Baggeroer, A.B., et al, [1985, p.420-428, eng] **41-221**

Geologic report for the Beaufort Sea planning area, Alaska. Craig, J.D., et al, [1985, 192p. + maps, eng] **41-694**

Ice thickness distribution in the Arctic islands, 1980. Wetzel, V., [1981, 15p. + tables, eng] **41-803**

Seismic activities in Vatnajökull, Iceland. Brandsdóttir, B., [1984, p.141-150, eng] **41-807**

Japanese earth science research at McMurdo Sound, 1985-1986. Kaminuma, K., [1986, p.138-147, jpn] **41-981**

Soviet glaciological studies on the eastern ice field in 1984-1985. [1986, p.10-16, rus] **41-1633**

Sea-floor spreading in the Arctic Basin. Kiselev, I.U.G., [1986, 224p., rus] **41-1748**

Deformation of till beneath ice stream B, West Antarctica. Alley, R.B., et al, [1986, p.57-59, eng] **41-1780**

Seismic exploration system. White, A.H., [1983, 6 col., eng] **41-1982**

Reflection experiment on a floating ice platform. Hajnal, Z., et al, [1987, p.201-208, eng] **41-2948**

Seismic cone penetration testing, offshore of the Mackenzie Delta. Campanella, R.G., et al, [1987, p.154-159, eng] **41-2979**

Engineering geology of the Government Hill area, Anchorage, Alaska. Updike, R.G., et al, [1986, 32p., eng] **41-3224**

Ice thickness data, 1978-80, Queen Elizabeth Is., N.W.T. Wetzel, V.F., [1981, 35p., eng] **41-3925**

Remote sensing in the Ross Ice Shelf region. Bentley, C.R., et al, [1987, p.20-29, eng] **41-4429**

**Seismic velocity**  
Freezing effect on seismic velocity in permafrost. Zimmerman, R.W., et al, [1986, p.1285-1290, eng] **41-1213**

Seismo-acoustic studies of frozen and thawed calcareous clays. Voronkov, O.K., et al, [1985, p.88-95, rus] **41-3129**

**Seismology**  
Glacier-generated earthquakes from Prince William Sound, Alaska. Wolf, L.W., et al, [1986, p.367-379, eng] **41-262**

Geologic studies in Alaska by the U.S. Geological Survey during 1985. Bartsch-Winkler, S., ed, [1986, 173p., eng] **41-664**

Strain anomalies during surges of Variegated Glacier, Alaska. Raymond, C.F., et al, [1986, p.178-191, eng] **41-677**

Stresses in the upper layer of the Hans Glacier, Spitzbergen. Cichowicz, A., [1986, p.13-19, eng] **41-1253**

Effect of snow on vehicle-generated seismic signatures. Albert, D.G., [1987, p.881-887, eng] **41-3887**

Microearthquakes of the eastern Ross Ice Shelf. Blankenship, D.D., et al, [1987, p.30-34, eng] **41-4430**

See also: Earthquakes

**Self diffusion**  
Self-diffusion coefficient at the solid-liquid interface. Bagchi, B., [1986, p.4667-4668, eng] **41-1440**

**Settlement (structural)**  
Formulas for calculating settlement of seasonally freezing ground. Pyschchev, N.F., [1985, p.91-93, rus] **41-320**

Stability of gravity platform foundation. Hoddinott, T., et al, [1986, p.127-135, eng] **41-358**

Deformation of snow and ice at German antarctic stations. Dörr, R., [1984, 124p., ger] **41-1272**

Sagging of thawing clayey grounds of different consistency. Khrustalev, L.N., et al, [1986, p.169-172, rus] **41-2097**

Design of Norman Wells pipeline for frost heave and thaw settlement. Nixon, J.F., et al, [1986, p.67-85, eng] **41-2516**

Calculation of permafrost thawing at the bottom of a water reservoir, accounting for settlement. Gogolev, E.S., et al, [1986, p.102-104, rus] **41-2545**

Arctic route geotechnical characterization and analysis: a systems approach. Vita, C.L., [1986, 271p., eng] **41-2645**

Building thawed-earth dams in northern climatic zone. Shatugin, V.A., [1986, p.80-83, rus] **41-2754**

Engineering geology in construction. Ziangirov, R.S., et al, [1986, 175p., rus] **41-2889**

Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p., rus] **41-2911**

Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] **41-2962**

Predicting settlement at a damsite on a tunnel valley deposit in Alberta. McClung, J.E., et al, [1987, p.45-57, eng] **41-2978**

Evaluation of road construction by surcharge over muskeg. Johnson, E.G., [1982, 13p. + append., eng] **41-3048**

Cyclic swelling of clays. Osipov, V.I., et al, [1987, p.23-36, rus] **41-3399**

Using frozen ground in dam construction in permafrost areas. Kuznetsov, G.I., et al, [1986, p.128-141, rus] **41-3456**

Establishing compressibility values of thawing permafrost. Maksimenko, E.S., et al, [1987, p.248-251, eng] **41-4166**

See also: Frozen ground settling

**Sewage disposal**  
Tracing fecal pollution by coprostanol in an ice-covered Finnish lake. Dürreth, S., et al, [1986, p.131-149, eng] **41-2477**

Water supply and sewage disposal in the Yamal Peninsula. Kataev, V.V., et al, [1987, p.8-9, rus] **41-3935**

See also: Waste disposal

**Sewage treatment**  
Microbial aspects of the Inuvik sewage lagoon. Henry, J.G., et al, [1986, p.117-128, eng] **41-349**

Sewage treatment in Yellowknife, N.W.T. Soniasy, R.N., et al, [1986, p.129-139, eng] **41-350**

Snow meltwater impurities from sewage effluent. Zapf, Gilje, R., et al, [1986, p.151-156, eng] **41-351**

Sludge dewatering at sewage treatment plants in Finland. Puolanne, J., [1981, p.107-117, eng] **41-392**

Freeze-thawing and dewatering plant for sewage sludges. Honda, T., et al, [1981, p.599-604, eng] **41-873**

See also: Aeration; Waste treatment

**Shaft sinking**  
Completion of the Voerde freeze shaft. Bittner, F., [1985, p.1423-1428, eng] **41-855**

Shaft sinking in water-bearing noncompetent strata in China. Ma, Y., et al, [1985, p.1434-1437, eng] **41-857**

Influence of freezing on strata behavior. Stoss, K., et al, [1985, p.1438-1444, eng] **41-858**

State of permafrost mined by the express method. Umantsev, R.F., [1985, p.52-54, rus] **41-1018**

**Shafts (excavations)**  
Heat transfer in a freezing shaft wall. Liandi, F., [1986, 24p., eng] **41-595**

Completion of the Voerde freeze shaft. Bittner, F., [1985, p.1423-1428, eng] **41-855**

Causes of fractured freeze pipes in the Hünxe shaft and their restoration. Wollers, K., [1985, p.1428-1433, eng] **41-856**

Determining the state of stress in shaft timbering during thawing. Abashin, S.I., et al, [1986, p.28-29, rus] **41-3769**

See also: Mine shafts

**Shattering**  
See: Frost shattering

**Shear flow**  
Glacier flow response to perturbations in ice thickness and surface slope. Echelmeyer, K.A., et al, [1986, p.285-298, eng] **41-689**

Numerical simulations with an idealized model. Haugen, J.E., [1986, p.151-160, eng] **41-1803**

Shear flow of granular materials as applied to avalanches. Szidarovszky, F., et al, [1986, 105p., eng] **41-3337**

**Shear properties**  
Origin of kinks in polycrystalline ice. Wilson, C.J.L., et al, [1986, p.27-48, eng] **41-1036**

Sea ice testing in flexure—the importance of shear deformations. Murat, J.R., et al, [1986, p.209-224, eng] **41-1593**

Dynamic recrystallization and fabric development during the simple shear of ice. Burg, J.P., et al, [1986, p.857-870, eng] **41-2809**

Shear-heating instabilities in the down-slope creep of ice sheets. Yuen, D.A., et al, [1986, p.314-320, eng] **41-4282**

**Shear strain**  
Designing filled-up piers with ice-bearing cores. Sokolov, A.V., [1986, p.34-42, rus] **41-2909**

**Shear strength**  
Shear strength loss of a silty sand subjected to frost action. Gifford, G.P., [1984, 296p., eng] **41-901**

Vane shear strength of snow. Kuriyama, H., et al, [1986, p.133-140, jpn] **41-1217**

Mechanical properties of antarctic sea ice (II). Urabe, N., et al, [1987, p.239-244, eng] **41-2427**

Cone penetration tests of the sediments off Richards I., N.W.T. Kurfurst, P.J., [1987, p.939-944, eng] **41-4018**

Influence of the melted snow water on landslides. Yoshida, S., [1985, p.91-97, jpn] **41-4591**

**Shear stress**  
Determination of pore ice stresses in frozen soils. Youssef, H., [1986, p.262-282, eng] **41-1101**

Saturated porous layer beneath active ice stream. Blankenship, D.D., et al, [1986, p.54-57, eng] **41-1779**

Deformation of till beneath ice stream B, West Antarctica. Alley, R.B., et al, [1986, p.57-59, eng] **41-1780**

Shear heating instabilities of large ice sheets. Yuen, D.A., et al, [1985, p.74-75, eng] **41-2634**

Some aspects of the flow of the Ronne Ice Shelf. Donke, C.S.M., [1987, p.75-98, eng] **41-3275**

Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] **41-3286**

Stress-gradient coupling in glacier flow. Kamb, B., [1986, p.335-341, eng] **41-4285**

**Shelf ice**  
See: Ice shelves

**Shelterbelts**  
See: Forest strips

**Shelters**  
Methods of building temporary structures from unconsolidated snow. Komarov, A.A., et al, [1986, p.80-84, rus] **41-2158**

Ice island underfoot. Chilingarov, A., et al, [1986, 175p., rus] **41-3250**



**Ship icing**

- Adhesion and physical properties of sea spray ice. Sackinger, W.M., et al, [1986, p.81-89, eng] 41-368
- Arctic/cold weather operations symposium, 1985; proceedings. [1986, 542p., eng] 41-924
- Overview of the Cold Weather Program. Kordenbrock, J.U., [1986, p.61-82, eng] 41-925
- Recent encounters with topside icing. Zahn, P.B., et al, [1986, p.123-147, eng] 41-928
- LAMPS MK III environmental capabilities. Olmstead, J., [1986, p.185-200, eng] 41-932
- Underway replenishment in cold weather. Lyon, G., [1986, p.215-221, eng] 41-934
- Degradation of surface ship operations in polar regions. Bales, S.L., et al, [1986, p.223-237, eng] 41-935
- Sea spray icing: a review of current models. Ackley, S.F., [1986, p.239-262, eng] 41-936
- Anti-icing and de-icing of naval surface ships. Garbe, G.H., [1986, p.263-282, eng] 41-937
- Prevention and retardation of ice formation at sea. Minasian, D.T., [1986, p.283-295, eng] 41-938
- Ship icing in the polar regions. Rogalski, R., [1986, p.379-406, eng] 41-942
- Arctic environmental support. Denner, W., [1986, p.429-434, eng] 41-944
- Superstructure icing: non-suitability of current forecasting aids for navy ships. Jeck, R.K., [1986, p.439-445, eng] 41-946
- Bath iron works corporation cold weather operations studies for the CG 47 class cruiser program. Crowley, J.D., [1986, p.447-451, eng] 41-947
- Spray ice bonding to superstructure coatings. Sackinger, W.M., [1986, p.453-455, eng] 41-948
- Modeling of spray ice accretion experiments. Sackinger, W.M., [1986, p.487-491, eng] 41-952
- Freeze protection of ships and shipborne equipment. Roberts, J., et al, [1986, p.500-542, eng] 41-954
- AP-1-88 hovercraft in ice operations. Rosquist, K., [1986, p.590-601, eng] 41-2047
- Prediction of vessel icing. Overland, J.E., et al, [1986, p.1793-1806, eng] 41-2845
- Superstructure icing in relation to ship safety and operations, Canada. Holburn, J.G., et al, [1986, 106p., eng] 41-3374
- Spray ice: a menace to mariners. Freeman, K., [1987, p.11-13, 39, eng] 41-3412
- Splashing a ship with collision-generated spray. Zakrzewski, W.P., [1987, p.65-83, eng] 41-4217
- Arctic ship technology: the state of the art—1986. Dick, R.A., et al, [1987, 91p., eng] 41-4582
- Ships**
- New offshore ship types for the frontier areas. [1986, p.22-24, eng] 41-88
- Forecasts and the efficiency of fleet performance. Collection of scientific papers. Shekelkanov, A.G., ed, [1985, 105p., rus] 41-487
- Computerized simulation of fleet performance in the Arctic. Batakhik, I.U.M., et al, [1985, p.48-53, rus] 41-489
- SA-15 ships for ice navigation in northern rivers. Varaksin, K.N., et al, [1985, p.54-56, rus] 41-490
- Efficiency of small Arctic barges. Vysotskaia, N.A., [1985, p.61-62, rus] 41-491
- Ice navigation properties of timber-transporting ships. Sokolov, L.G., et al, [1984, p.29-37, rus] 41-542
- Guidance systems for ships operating in ice. Likhachev, A.V., [1984, p.36-42, rus] 41-558
- Arctic vessel research laboratory and program. Jeffrey, N.E., [1986, p.467-468, eng] 41-950
- On the frequency analysis of ice peaks. Javanainen, M., [1986, p.222-227, eng] 41-1098
- Diesel engines designed for navigation in heavy ice. [1985, p.70-73, rus] 41-1519
- Tugboat-barge equipped for ice navigation. [1985, p.80-81, rus] 41-1520
- Finland to build ice-breaking cargo ships and snow-going vehicles. [1985, p.100-102, rus] 41-1521
- Valmet Co. program for ice testing of propeller nozzles. [1985, p.108-109, rus] 41-1523
- Requirements for the strength of offshore structures in the Arctic. Galakhov, I.N., et al, [1986, p.1-22, eng] 41-1579
- Progress in developing new design guidelines for ice transiting ships. Seibold, F., et al, [1986, p.537-552, eng] 41-1617
- Operation of ships in the Arctic. Köhler, P.E., et al, [1986, p.553-562, eng] 41-1618
- Arctic Ivik—a new Arctic class II vessel for the Beaufort Sea. Armour, R., et al, [1986, p.244-256, eng] 41-2030
- Improving Doppler radio logs installed on ice navigating ships. Cherniavets, V.V., et al, [1987, p.26-27, rus] 41-2209
- Offshore technology in Finland—present state and future perspectives. Potila, A., [1986, p.25-35, eng] 41-2264
- Experimental study of maneuverability of icebreakers and ships in sea ice. Ionov, B.P., et al, [1986, p.276-297, eng] 41-2279
- MV Robert LeMour ice/propeller interaction project: full-scale data. Laskow, V., et al, [1986, p.301-319, eng] 41-2285

**Ship/ice interaction pressures and energies during ship ramming.**

- Kivisild, H.R., et al, [1987, p.215-223, eng] 41-2424
- Design criteria for Arctic shipping. Jordaan, I.J., et al, [1987, p.401-406, eng] 41-2449
- Canadian Beaufort: a corrosive extreme. Lingnau, D.G., [1986, p.45-51, eng] 41-2740
- Automated navigational aids for icebreaking cargo ships. Koshevoi, A.A., et al, [1987, p.20-22, rus] 41-2785
- Calculating the cold resistance of shipbuilding steel. Sokolov, A.O., [1987, p.42-43, rus] 41-2787
- Correlation of model and full-scale ice navigation experiments. Wolff, K., [1986, p.43-48, ger] 41-2859
- Research and development looking hard at ice-going propulsion and passenger ships. [1986, p.7-8, eng] 41-2964
- Experimental ice navigation of diesel ship. Burkov, G., et al, [1986, p.42-45, rus] 41-3204
- Temperature fields in the hulls of Arctic ships. Zimnitskii, I.U.A., et al, [1985, p.9-10, rus] 41-3350
- Navigation and ship control. Collection of works. Panin, I.U.I., ed, [1986, 137p., rus] 41-3383
- Icebreaker pilotage of "Dmitrii Donskoi" type ships along the Yenisey River in the winter-spring season. Plotnikov, K.S., [1986, p.98-103, rus] 41-3384
- Technical operation of ship propulsion plants. Collection of works. Panin, I.U.I., ed, [1986, 120p., rus] 41-3385
- Working conditions of power transmissions of ice-navigating ships. Levin, B.M., et al, [1986, p.3-8, rus] 41-3386
- Performance of propulsion system elements in SA-15 ships in ice. Volosov, M.I., [1986, p.9-23, rus] 41-3387
- Improving the performance of cooling systems on ice navigating ships. Aksel'rod, S.B., [1986, p.23-31, rus] 41-3388
- Modeling turbogear assemblies of ice-navigating ships. Basalygin, G.M., [1986, p.39-48, rus] 41-3389
- Noise and vibration of motorships in thick ice cover. Zinchenko, V.I., et al, [1986, p.48-63, rus] 41-3390
- To change the tactics of ship pilotage in ice. Leskov, M., [1987, p.30-31, rus] 41-3613
- Soviet operations on the northern sea routes, 1986. Armstrong, T., [1987, p.585-590, eng] 41-3857
- Ships used in the exploitation of offshore deposits. Gorskii, K., et al, [1987, p.221-231, rus] 41-4147
- Ship for scientific expeditions to Antarctica. Seppanen, E., [1987, p.244-246, rus] 41-4148
- Ice conditions during the Mikhail Somov cruise in a Soviet antarctic expedition. Proshutinskii, A.I.U., et al, [1986, p.75-78, rus] 41-4190
- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed, [1984, 24p., rus] 41-4503
- Methods of studying contact interactions of materials with ice and snow. Igoshin, V.A., et al, [1984, p.3-7, rus] 41-4504
- Problem of diminishing the force of icebreaker friction against ice. Maksutov, D.D., [1984, p.15-16, rus] 41-4508
- Adhesion of ice-snow masses to moving ships. Voevodin, V.A., [1984, p.17-19, rus] 41-4509
- See also: Icebreakers; Oceanographic ships; Submarines; Tanker ships
- Shock waves**
- Blasting and blast effects in cold regions. Part 2: underwater explosions. Mellor, M., [1986, 56p., eng] 41-3020
- Shore erosion**
- Role of ground frost, snow cover, ice break-up and flooding in the fluvial processes of the Oulanka River, NE Finland. Koutaniemi, L., [1984, p.127-161, eng] 41-265
- Problems of studying sediment balance in coastal zones of seas. Shuiskii, I.U.D., [1986, 240p., rus] 41-516
- Ground-water fluctuations in hillslopes of coastal Alaska. Sidle, R.C., [1984, p.79-95, eng] 41-627
- Shore processes in the coastal zone of western Yamal. Smirnov, V.M., [1986, p.425-428, rus] 41-887
- Heat release during agitated water movement near the ice surface. Gogolev, E.S., et al, [1985, p.14-16, rus] 41-1816
- Heat transfer from waves impacting on ice surface. Gogolev, E.S., et al, [1986, p.58-62, eng] 41-1854
- Exogenic relief formation in the Far East. Skrylnik, G.P., ed, [1985, 155p., rus] 41-1908
- Quantitative evaluation of the role of near-shore ice in shoreline modification in the Okhotsk Sea. Stepanova, L.E., [1985, p.90-98, rus] 41-1909
- Bank conditions and erosion along selected reservoirs. Gatto, L.W., et al, [1987, p.143-154, eng] 41-2495
- Coastal processes along the west coast of Yamal. Smirnov, V.M., [1986, p.317-321, eng] 41-3623
- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. [1986, 166p., rus] 41-4060
- Geographic studies of coastal zones of Arctic seas. Novikov, V.N., et al, [1986, p.5-7, rus] 41-4061
- Ice rafting of clastic material. Borsuk, O.A., [1985, p.51-54, rus] 41-4561
- Shore ice**
- See: Fast ice

**Shoreline modification**

- Natural hazards and research needs in coastal and ocean engineering. Nath, J.H., ed, [1984, 62p., eng] 41-83
- Sea ice breakup and tidal flats processes. Frobiher Bay, Baffin Island. McCann, S.B., et al, [1986, p.168-180, eng] 41-362
- Engineering analysis of beach erosion at Homer Spit, Alaska. Smith, O.P., et al, [1985, 29p. + 5 appenda., eng] 41-528
- Use of water resources and the formation of water-reservoir shores in Siberia. Kuakovskii, V.S., et al, [1986, p.3-7, rus] 41-811
- Shore processes in the coastal zone of western Yamal. Smirnov, V.M., [1986, p.425-428, rus] 41-887
- Quantitative evaluation of the role of near-shore ice in shoreline modification in the Okhotsk Sea. Stepanova, L.E., [1985, p.90-98, rus] 41-1909
- Ice ramps and the history of studies on them. Sasaki, T., [1986, p.215-221, jpn] 41-2605
- Cryogenic-inversion ridges of northwestern Siberia. Bolikhovskii, V.F., et al, [1986, p.128-132, rus] 41-2829
- Changes in geocryological conditions of water-reservoir basins. Onikienko, T.S., [1986, p.83-88, rus] 41-3450
- Geologic studies in Alaska by the U.S. Geological Survey during 1986. Hamilton, T.D., ed, [1987, 195p., eng] 41-3466
- Shoreline evolution at a retreating Arctic coastal site. Reimnitz, E., et al, [1987, p.161-164, eng] 41-3469
- Coastal processes along the west coast of Yamal. Smirnov, V.M., [1986, p.317-321, eng] 41-3623
- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. [1986, 166p., rus] 41-4060
- Geographic studies of coastal zones of Arctic seas. Novikov, V.N., et al, [1986, p.5-7, rus] 41-4061
- Shores**
- Injection ice formation during subaqueous freezing of sediments. Gravis, G.F., [1986, p.108-112, rus] 41-116
- Nature of winter ruptures in sea ice covers. Gorbunov, I.U.A., et al, [1986, p.131-134, rus] 41-121
- Coastal ecology and the Arctic oil industry. Sendstad, E., [1986, p.87-96, eng] 41-347
- Problems of studying sediment balance in coastal zones of seas. Shuiskii, I.U.D., [1986, 240p., rus] 41-516
- Shore processes in the coastal zone of western Yamal. Smirnov, V.M., [1986, p.425-428, rus] 41-887
- Chemically dispersed and untreated oils on arctic shores. Boehm, P.D., [1984, p.338-360, eng] 41-896
- U.S. Coast Guard Arctic Pollution Response Research and Development. Fitzpatrick, M., [1985, p.863-865, eng] 41-1914
- Interactions between artificial lakes and permafrost. Afanasenko, V.E., et al, [1986, p.120-127, rus] 41-2092
- Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., [1986, p.62-63, rus] 41-3541
- Coastal processes along the west coast of Yamal. Smirnov, V.M., [1986, p.317-321, eng] 41-3623
- Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed, [1986, 135p., rus] 41-4572
- See also: Banks (waterways); Beaches; Coastal topographic features
- Side looking radar**
- Side-looking airborne radar detection and identification of icebergs. Edwards, N.C., Jr., et al, [1986, p.546-554, eng] 41-165
- Combined optical and radar methods for studying the environment. Shestopalov, V.P., et al, [1984, p.963-964, eng] 41-515
- Study of ice covers by radiophysical means from aerospace platforms. Effimov, V.B., et al, [1985, p.394-399, eng] 41-1892
- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, [1986, 160p., rus] 41-2714
- Cluster analysis of airborne-radar images of ice covers. Amus, V.V., et al, [1986, p.64-72, rus] 41-2718
- Influence of reflections from atmospheric precipitation on the characteristics of radar images of sea ice. Aleksandrov, V.I.U., [1985, p.70-76, rus] 41-3431
- Signy Island**
- Model for rock fracture during freezing at Signy Island. Hall, K., [1986, p.53-60, eng] 41-801
- Freeze thaw simulations on quartz-micaschist on Signy Island. Hall, K., [1986, p.19-30, eng] 41-2359
- Silane**
- Asphalt pavement durability improved by surface treatment. Anzaki, Y., et al, [1987, p.619-636, eng] 41-4038
- Silver iodide**
- Studying vertical distribution of ice-forming nuclei. Khusid, S.V., et al, [1986, p.85-89, rus] 41-1452
- Photostimulated ice-forming activity centers in silver iodide aerosols. Oleinik, R.V., [1986, p.93-97, rus] 41-1453
- Structural anomalies in ice-forming silver iodide aerosols. Borovoi, N.A., et al, [1986, p.97-99, rus] 41-1454

- Silver iodide (cont.)**  
Winter cloud seeding in Bridger Mountain Range, Montana. Super, A.B., et al, [1986, p.1926-1933, eng] 41-4057
- Simulation**  
Structure and dielectric properties at 4.8 and 9.5 GHz of saline ice. Arcone, S.A., et al, [1986, p.14,281-14,303, eng] 41-1857  
Correlation of model and full-scale ice navigation experiments. Wolff, K., [1986, p.43-48, ger] 41-2859  
See also: Computerized simulation; Environment simulation; Models
- Site accessibility**  
Organizing construction of the Kureyskaya hydroelectric power plant. Zalt'sman, O.M., et al, [1986, p.17-23, rus] 41-2864
- Site surveys**  
Ice core drill site at Law Dome summit. Hamley, T.C., et al, [1986, 34p., eng] 41-459  
Site selection for structures on a floating ice shelf, Antarctica. Sharma, S.S., [1986, p.1093-1105, eng] 41-1147  
Structures on a floating ice shelf in Antarctica. Sharma, S.S., [1986, p.298-311, eng] 41-2280  
Organization of construction under special environmental and climatic conditions. Construction manual. Shakhparonov, V.V., et al, [1986, 255p., rus] 41-2862  
Organizing construction of the Kureyskaya hydroelectric power plant. Zalt'sman, O.M., et al, [1986, p.17-23, rus] 41-2864  
Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, [1986, p.36-41, rus] 41-2918  
Harbor design for ice conditions. Wortley, C.A., [1987, p.14-15, eng] 41-3410  
Engineering preparations for construction of the Surgut Power Plant. Lutsiuk, I.V., et al, [1987, p.14-17, rus] 41-3808  
See also: Construction sites
- Skid resistance**  
Passenger car tests of antilock systems under winter conditions. Nordström, O., [1986, 37p. + append., swe] 41-2218
- Skis**  
Studies of the mechanical properties of cross-country skis. Erkkila, J., et al, [1986, 24p., eng] 41-3802  
Adfreezing of the materials of skis' sliding surfaces to snow and ice. Ermakov, K.K., [1984, p.10-12, rus] 41-4506  
Derivation of the polymer-snow friction coefficient. Ermakov, K.K., [1984, p.12-15, rus] 41-4507
- Slab avalanches**  
See: Snow slides
- Sleds**  
Problems of snow cover classification when studying its trafficability by different type vehicles. Ushakov, A.I., [1986, p.146-149, rus] 41-1658
- Sliding**  
Debris-influenced sliding laws and basal debris balance. Shoemaker, E.M., [1986, p.224-231, eng] 41-682  
See also: Basal sliding
- Slope orientation**  
Radiation balance of Pamir slopes. Finaev, A.F., [1986, p.174-180, rus] 41-130  
Effects of ice thickness and surface slope on glacier flow. Kamb, B., et al, [1986, p.267-284, eng] 41-688  
Short-wave radiation balance and heat flux in alpine soils. Kozhaev, D.A., et al, [1985, p.66-75, rus] 41-1039  
Productivity of forest phytocenoses. Elagin, I.N., ed, [1984, 149p., rus] 41-1078  
Differentiation in forest conditions of mountain regions and phytocenotic productivity. Ziganshin, R.A., [1984, p.78-87, rus] 41-1081  
Calculating the amount of solar radiation heat reaching mine roads. Bazavluk, V.A., [1986, p.192-200, rus] 41-2100  
Soil cover of the Bilimbayev model forest. Firsova, V.P., et al, [1986, p.45-72, rus] 41-2875  
Radiation and heat regime of some high-mountain biocenoses. Kucherenko, V.E., [1986, p.66-86, rus] 41-2880  
Stress in a wavy snow cover on a plane slope. Yoshida, Z., et al, [1986, p.27-36, jpn] 41-3877
- Slope processes**  
Analysis and monitoring of avalanche glaciocystems. Kanayev, L.A., [1986, p.43-53, rus] 41-104  
Genesis of snow avalanches in Dzhungarskiy Alatau. Dzituba, V.V., [1986, p.186-190, rus] 41-132  
Experience in compiling and using complex engineering glaciological maps. Osokin, N.I., et al, [1986, p.213-219, rus] 41-137  
Formula for calculating horizontal forces produced by thawing ground. Bondarenko, G.I., [1985, p.53-55, rus] 41-302  
Development of cryogenic processes in the central Transbaikalia. Shesternev, D.M., et al, [1985, p.74-76, rus] 41-311  
Slopes and talus of NW Greenland. Malaurie, J., [1985, p.63-79, fre] 41-374  
Types of evolution and slope dynamics in North Labrador. André, M.F., [1985, p.81-94, fre] 41-375  
Quaternary research (Selected papers of the 11th INQUA Congress). Kartashov, I.P., ed, [1986, 200p., rus] 41-549  
Mars: periglacial and glacial relief forms. Lucchitta, B.K., [1986, p.183-193, rus] 41-550  
Engineering-geological observation polygons for studies and control of human factors impact on the development of exogenic processes. Niazov, R.A., [1986, p.70-79, rus] 41-602  
Types of mudflows and danger areas in the Kirghiz Range. Bobushev, T.S., [1984, p.35-41, rus] 41-725  
Snow physics, avalanches, mudflows. Bolov, V.R., ed, [1985, 108p., rus] 41-836  
Mudflow-hazard areas of northern Caucasus. Gerasimov, V.A., [1985, p.39-46, rus] 41-843  
Mudflow formation and transformation processes in the Gerkhzhansu River basin. Dokukin, M.D., [1985, p.58-71, rus] 41-845  
Shore processes in the coastal zone of western Yamal. Smirnov, V.M., [1986, p.425-428, rus] 41-887  
Methods of geomorphological field experiments in the USSR. Dedkov, A.P., ed, [1986, 160p., rus] 41-1197  
Slow hydrothermal movements of soil and ground masses on slopes (creep). Dedkov, A.P., et al, [1986, p.77-90, rus] 41-1198  
Methods of studying solifluction in Franz Josef Land. Zhigarev, L.A., et al, [1986, p.120-129, rus] 41-1200  
Studying cryogenic processes at research institutes. Ivanovskii, L.N., et al, [1986, p.136-149, rus] 41-1202  
Alpine debris fans in the Canadian Rocky Mountains. Sauchyn, D.J., [1986, p.191-217, eng] 41-1255  
All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings. [1985, 126p., rus] 41-1362  
Ground water level rise in Siberia and the Far North and East. Gospodinov, D.G., [1985, p.27-33, rus] 41-1363  
Impact strength of mudflow mass on transverse structures. Kukhalashvili, E.G., et al, [1985, p.356-360, rus] 41-1623  
Calculating the ultimate balance of a mudflow mass. Kukhalashvili, E.G., et al, [1985, p.373-376, rus] 41-1625  
Results of laboratory investigations of newly designed mudflow control structures of semi-cylindrical form. Gavardashvili, G.V., [1986, p.169-171, rus] 41-1626  
Conditions conducive to glacial mudflow in the Aktru River valley, Altai Mountains, June 24, 1984. Barashkova, N.K., et al, [1986, p.121-124, rus] 41-1651  
Classification of exogenic relief-forming processes on land. Vyrrin, V.B., [1986, p.20-24, rus] 41-2247  
Sedimentation at the foot of volcanoes in various climatic settings. Kuralenko, N.P., [1986, 111p., rus] 41-2363  
Rock glaciers. Gorbunov, A.P., et al, [1986, p.73-77, rus] 41-2535  
Examples of studying landslide processes in Canada. Rechitskii, V.I., [1986, p.96-104, rus] 41-2548  
Methods of calculating mudflow characteristics. Vinogradov, I.U.B., [1985, p.83-89, rus] 41-2730  
Morphology and lithogenesis of rock streams. Govorushko, S.M., [1986, 120p., rus] 41-2901  
Weathering effects: slopes in mudrocks and over-consolidated clays. Taylor, R.K., et al, [1987, p.405-445, eng] 41-3044  
Rock glaciers of the Dzhemit-Bel Range, Central Tien Shan. Tarakanov, A.G., [1987, p.63-67, rus] 41-3081  
Using satellite survey data for studying mass transfer in glacial systems. Nosenko, G.A., [1986, p.26-31, rus] 41-3211  
Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed, [1986, 165p., rus] 41-3428  
Dislocations and permafrost development in the Pleistocene deposits of northern USSR. Popov, A.I., [1986, p.146-153, rus] 41-3429  
Evaluating slope stability at different temperature regimes. Ukhov, S.B., et al, [1986, p.106-113, rus] 41-3453  
Peculiarities of mapping rock glaciers. Gorbunov, A.P., et al, [1986, p.5-22, rus] 41-3482  
Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains. Severskii, I.V., et al, [1986, p.29-38, rus] 41-3484  
Coastal processes along the west coast of Yamal. Smirnov, V.M., [1986, p.317-321, eng] 41-3623  
Regime of glaciers in central Tien Shan. Dikikh, A.N., ed, [1986, 136p., rus] 41-3805  
Permafrost distribution and slope processes in central Tien Shan. Tarakanov, A.G., [1986, p.98-109, rus] 41-3807  
Significance of rock glaciers in the formation and development of lakes in the Tien Shan highlands. Tarakanov, A.G., [1985, p.137-145, rus] 41-3871  
Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. [1986, 166p., rus] 41-4060  
Dangerous glacial slope processes in mountain ecosystems of Siberia. Laptev, M.N., et al, [1986, p.63-65, rus] 41-4065  
Role of major floods in glacier basins. Johnson, P.G., et al, [1986, p.82-87, 195-200, rus] 41-4346  
Engineering protection of mountainous regions from dangerous glacial processes. Grakovich, V.F., et al, [1986, p.102-104, 214-216, rus] 41-4350  
New information on rock streams. Shvetsov, P.F., et al, [1983, p.103-105, rus] 41-4485  
Signs of "semiarid" pediplanation on Mars. Polosukhin, V.P., [1987, p.79-85, rus] 41-4497  
Genetic and facies analysis of glacial deposits. Zol'nikov, I.D., [1986, 78p., rus] 41-4523  
Drainage of the Ob' River basin and its utilization. Nikolaev, V.A., ed, [1986, 135p., rus] 41-4572  
Development of landslide processes in the lower Ob' River valley. Okhalin, S.N., et al, [1986, p.106-116, rus] 41-4574
- Slope protection**  
Endicott slope protection design and construction. Munday, J.P., et al, [1987, p.47-54, eng] 41-2401  
Monitoring of thawing permafrost slopes. McRoberts, E.C., et al, [1986, p.133-151, eng] 41-2520  
Criteria for scaling rock and avalanche defense structures. Menegus, F., et al, [1986, 146p., ita] 41-2568
- Slope stability**  
Bibliography of landslides in Alaska. Galloway, J.P., [1986, 54p., eng] 41-797  
Influence of cryogenic phenomena on the performance of monolithic, concrete, filterless reinforcement of slopes of cohesive-earth dams. Kanarskii, V.F., et al, [1986, p.41-43, rus] 41-1403  
Soil slope stability in a channel with plastic lining. Zhou, L., [1986, p.245-248, chi] 41-1423  
Mapping of mountain hazards. Ives, J.D., [1986, p.111-124, eng] 41-1977  
Quantitative study of slope instability in the Gulf of Alaska. Hampton, M.A., et al, [1978, p.2307-2318, eng] 41-2127  
Slope stability; geotechnical engineering and geomorphology. Anderson, M.G., ed, [1987, 648p., eng] 41-3042  
Groundwater models for mountain slopes. Okunishi, K., et al, [1987, p.265-285, eng] 41-3043  
Mechanisms of mass movement in periglacial environments. Harris, C., [1987, p.531-559, eng] 41-3045  
Analysis of potential slope instability due to wave loading on the Nova Scotian shelf. Moran, K., et al, [1986, p.980-999, eng] 41-3171  
Evaluating slope stability at different temperature regimes. Ukhov, S.B., et al, [1986, p.106-113, rus] 41-3453  
Influence of the melted snow water on landslides. Yoshida, S., [1985, p.91-97, jpn] 41-4591
- Slopes**  
Calculating sums of global radiation on mountain slopes. Samukashvili, R.D., [1985, p.78-89, rus] 41-847  
Snow control for sloped glazing—an energy penalty. Schuyler, G.D., et al, [1986, p.443-448, eng] 41-1382  
Trafficability of snow cover by wheeled vehicles from experimental data. Ioffe, D.I.A., et al, [1986, p.146-153, rus] 41-2168  
Field test to assess snow-slope stability. Conway, H., et al, [1986, p.535-537, eng] 41-4310
- Sludges**  
Sludge dewatering at sewage treatment plants in Finland. Puolanne, J., [1981, p.107-117, eng] 41-392  
Freeze-thawing and dewatering plant for sewage sludges. Honda, T., et al, [1981, p.599-604, eng] 41-873  
Effect of snowmelt on the active sludge process. Särner, E., et al, [1982, p.17-33, swe] 41-2855  
Sludge freeze-thaw dewatering—an alternative for small wastewater treatment plants. Särner, E., [1982, p.164-180, swe] 41-2856  
Problems and opportunities with winter wastewater treatment. Reed, S.C., [1986, p.16-20, eng] 41-2965  
Implementing direct filtration and natural freezing of alum sludge. Fitch, D.E., et al, [1986, p.52-56, eng] 41-3779  
Treatment and disposal of alum and other metallic hydroxide sludges. Reed, S.C., et al, [1987, 40p. + plates, eng] 41-4142
- Sluices (hydraulic engineering)**  
Design for an insulated foundation of culvert and sluice. Yu, B., et al, [1986, p.261-266, chi] 41-1427
- Slush**  
Final report on freezeup studies. RU 205. [1986, var.p., eng] 41-1208  
Slush ice as a geologic agent. Reimnitz, E., et al, [1986, 19p., eng] 41-1211  
There are different types of ice. Berdnikov, D., [1986, p.46-47, rus] 41-1399  
Ice diatom floras in Arthur Harbor. Krebs, W.N., et al, [1987, p.163-171, eng] 41-3427  
See also: Wet snow

**Smoke generators**

- Use of ground smoke-generators in mountains. Laktionov, A.G., [1982, p.68-73, eng] 41-1007  
Formation kinetics of ice crystals on aerosol particles in supercooled fog. Effect of water vapor exhaustion. Gorbunov, B.Z., et al, [1986, p.333-334, eng] 41-3162

**Snow**

- Snow and ice in Earth's environment. Kotliakov, V.M., [1986, 157p., rus] 41-698  
Russian-English Arctic environment glossary. [1985, 150p., rus] 41-1897  
Science in Antarctica, Vol.9: Data compilation. [1985, 288p., jpn] 41-1918  
Guide for extreme cold weather operations. Barclay, D.D., comp, [1986, c450p., eng] 41-2483  
Russian-English Arctic environment glossary. [1987, 219p., eng] 41-2887  
Method for the continuous monitoring of snow: application to the cryoendolithic microbial community of Antarctica. Friedmann, E.I., et al, [1985, p.179-181, eng] 41-3322  
Adfreezing of the materials of skis' sliding surfaces to snow and ice. Ermakov, K.K., [1984, p.10-12, rus] 41-4506  
See also: Artificial snow; Blowing snow; Colored snow; Slush; Wet snow

**Snow accumulation**

- Simulating snow loads on fabric roofs. Petersen, R.L., [1986, p.894-901, eng] 41-100  
Volcanism and glaciers in the Anthropocene. Melekestsev, I.V., [1986, p.27-35, rus] 41-102  
Accuracy of calculations of snow depth in avalanche catchments. Chernous, P.A., et al, [1986, p.201-206, rus] 41-135  
Countermeasures against damage by heavy snowfall in Nagano District. Tsuchiya, Y., [1985, p.9-12, jpn] 41-177  
Countermeasures against damage by snowfall on distribution facilities. Kato, I., [1985, p.29-32, jpn] 41-184  
Snowdrift models. Irwin, P.A., et al, [1985, p.4-11, eng] 41-334  
Avalanches in the Niigata Prefecture, Japan, 1986. Kobayashi, S., [1986, p.87-91, jpn] 41-442  
Predicting forest snow water equivalent. Bergman, J.A., [1985, p.154-162, eng] 41-449  
Snow management practices for increasing soil water reserves in frozen prairie soils. Gray, D.M., et al, [1985, p.256-263, eng] 41-452  
Glaciological investigations in 1984 at Tasersiaq and Qapiarfut sormia, West Greenland. Olesen, O.B., [1985, p.104-107, eng] 41-575  
Glacier-climate investigations in 1984, West Greenland. Braithwaite, R.J., [1985, p.108-111, eng] 41-576  
Stable isotope stratigraphy of ice cores and the age of the last eruption at Mount Melbourne, Antarctica. Lyon, G.L., [1986, p.135-138, eng] 41-610  
Follow-up measurements of Pasterze (Glockner group) in 1984. Wakonigg, H., [1984, p.223-228, ger] 41-637  
Some relationship between antarctic ice extent and climate. Peng, G., et al, [1983, p.303-309, chi] 41-673  
Glaciology of mountainous regions. Suslov, V.F., ed, [1986, 136p., rus] 41-769  
Classification of dry and wet snow avalanches. Kharitonov, G.G., [1986, p.23-32, rus] 41-772  
Long period regime of a drifted snow field. Pertsiger, F.I., [1986, p.117-123, rus] 41-782  
Organization of avalanche risk forecasting. Current status and prospects. Pahaut, E., [1985, p.17-32, fre] 41-861  
Snow deflector built at the edge of a road cut. Anno, Y., [1986, p.121-129, eng] 41-1283  
Influence of forestry and forest complexes on river runoff. Mishon, V.M., et al, [1986, p.71-75, rus] 41-1368  
Pb-210 measurement of snow accumulation at Mizuho Station. Masuda, N., et al, [1986, p.159-165, eng] 41-1472  
Simulation of snow depth in a forest. Woo, M.-K., et al, [1985, p.44-54, eng] 41-1483  
Snow accumulation and snowmelt runoff in a suburban environment. Buttle, J.M., [1985, p.126-138, eng] 41-1490  
Winter precipitation in central New Brunswick, Canada. Palmer, D.C., [1985, p.230-236, eng] 41-1498  
Overhead line icing. Fernet, M., [1986, p.2-8, fre] 41-1559  
Design of overhead lines to withstand climatic phenomena. Vieille, J., [1986, p.9-13, fre] 41-1560  
Modelling the formation and melting of snow cover. Motovilov, I.U.G., et al, [1986, p.50-56, rus] 41-1637  
Establishing periods of stable snow cover duration in mountains. Tsarev, B.K., et al, [1986, p.73-78, rus] 41-1641  
Snow accumulation at the alimentation-limit altitude of Spitzbergen glaciers. Krenke, A.N., et al, [1986, p.90-93, rus] 41-1644  
Calculating snow-transfer volumes during snowstorms. Diunin, A.K., et al, [1986, p.155-160, rus] 41-1660  
Probabilistic models for ground snow accumulation. Ellingwood, B., [1984, p.49-58, eng] 41-1946  
Ground snow loads for Idaho. Sack, R.L., et al, [1984, p.59-63, eng] 41-1947

- Calculation of maximum annual snow reserves in river basins. Galakhov, V.P., et al, [1986, p.100-105, rus] 41-1967  
Process of hard snow formation on East Siberian roads. Maevskii, A.A., [1986, p.87-92, rus] 41-2160  
Winter maintenance of urban roads with high traffic performance. Baiano, G., [1986, p.57-61, ita] 41-2232  
Snow and avalanches in the Swiss Alps, winter 1984-85. [1986, 172p., ger] 41-2290  
Snow and avalanches in the Davos region. Föhn, P., et al, [1986, p.29-44, ger] 41-2291  
Snow accumulation and melt during rainfall in forest land, Oregon. Berris, S.N., et al, [1987, p.135-142, eng] 41-2465  
Snow distribution patterns in clearings and adjacent forest. Golding, D.L., et al, [1986, p.1931-1940, eng] 41-2466  
Snow levels and amounts in the mountains of southern California. Minnich, R.A., [1986, p.37-58, eng] 41-2699  
Snowfall over Shinjo City, Japan, 1985. Yagi, T., et al, [1986, p.9-24, jpn] 41-3006  
Snow accumulation on a narrow board. Kobayashi, D., [1987, p.239-245, eng] 41-3035  
Nitrate deposition in Antarctica: temporal and spatial variations. Laird, C.M., [1986, 268p., eng] 41-3155  
Structural basis of snow-retention efficiency of forest strips. Kolomiets, V.A., [1986, p.94-97, rus] 41-3261  
Recent research in snow hydrology. Dozier, J., [1987, p.153-161, eng] 41-3509  
JARE-26 glaciological research, 1984-1986. Ageta, Y., et al, [1987, 71p., eng] 41-3668  
Hydrologic studies in mountain forests of the U.S.S.R. Gan, P.A., ed, [1985, 172p., rus] 41-3872  
Snow accumulation in the Khamar-Daban forests. Onuchin, A.A., [1985, p.109-119, rus] 41-3873  
First glaciological expedition to West Kunlun Mountains 1985. Watanabe, O., et al, [1987, p.77-84, eng] 41-3918  
Method for monthly charting of atmospheric precipitation. Briazgin, N.N., [1986, p.109-116, eng] 41-3954  
Risser-Larsen oxygen isotopes and accumulation rates. Orheim, O., et al, [1986, p.33-47, eng] 41-4095  
Fundamentals of avalanche science. Bozhinskii, A.N., et al, [1987, 280p., rus] 41-4129  
Snow cover formation in pine, spruce and black alder forests. Blintsov, I.K., et al, [1987, p.15-18, rus] 41-4171  
Accumulation distribution in Adélie Coast and meteorological parameters. Pettre, P., [1986, p.486-500, eng] 41-4304  
Effects of forests on wetland runoff during spring. Woo, M.-K., et al, [1987, p.297-307, eng] 41-4319  
On snow particles comprising an aggregate. Fujiyoshi, Y., et al, [1984, p.87-90, eng] 41-4376  
Adhesion of ice-snow masses to moving ships. Voevodin, V.A., [1984, p.17-19, rus] 41-4509  
Microbial environment in Ross desert from satellite nanoclimate data, 1984-1986. Friedmann, E.I., et al, [1987, p.273-287, eng] 41-4627  
**Snow acoustics**  
Devices for measuring snow avalanche velocities. Bagov, M.M., et al, [1985, p.22-30, rus] 41-840  
Electromagnetic irradiance during avalanche movement. Mikhnevskii, N.D., et al, [1985, p.31-34, rus] 41-841  
Snow acoustic impedance model. Buser, O., [1986, p.71-92, eng] 41-1262  
Radar backscatter from land, sea, rain and snow at millimeter wave length. Dyer, F.B., et al, [1985, p.250-254, eng] 41-1360  
**Snow air interface**  
Atmospheric toxic metals in snow and ice. Boutron, C.F., [1986, p.467-505, eng] 41-672  
Some relationship between antarctic ice extent and climate. Peng, G., et al, [1983, p.303-309, chi] 41-673  
Theory for scalar roughness and transfer coefficients over snow and ice. Andreas, E.L., [1987, p.159-184, eng] 41-2364  
Measurements of refractive index spectra over snow. Andreas, E.L., [1986, p.248-260, eng] 41-2984  
Accumulation distribution in Adélie Coast and meteorological parameters. Pettre, P., [1986, p.486-500, eng] 41-4304  
**Snow compaction**  
Snow management at ski areas: hydrologic effects. Kattelmann, R., [1985, p.264-272, eng] 41-453  
Methods of building temporary structures from unconsolidated snow. Komarov, A.A., et al, [1986, p.80-84, rus] 41-2158  
Methods of making artificial snow and its physical properties. Mekhov, K.S., [1986, p.84-87, rus] 41-2159  
Process of hard snow formation on East Siberian roads. Maevskii, A.A., [1986, p.87-92, rus] 41-2160  
Casey snow runway data report, 1983-84. Russell-Head, D.S., et al, [1984, 98p., eng] 41-4526  
**Snow composition**  
Composition of unrimed and rimed snow crystals. Borys, R.D., et al, [1982, p.61-62, eng] 41-4  
Meteorology and climatology of snow avalanches in Montana. Butler, D.R., [1986, p.72-87, eng] 41-73

- Forest fire effect on chemical composition of snow cover. Ivanov, A.V., [1986, p.180-186, rus] 41-131  
Sources of organic nitrogen, phosphorus and carbon in antarctic streams. Downes, M.T., et al, [1986, p.215-223, eng] 41-613  
Heliogeophysics and the control of natural environments. Danilova, A.D., ed, [1986, 192p., rus] 41-652  
Separating the background component of snow pollution near industrial sources. Kerbi, S.B., et al, [1986, p.119-123, rus] 41-653  
Composition of snow in Pacific coastal mountains. McBean, G.A., et al, [1986, p.1161-1164, eng] 41-794  
Experimental study of the dry deposition of gaseous nitric acid to snow. Johansson, C., et al, [1986, p.1165-1170, eng] 41-795  
Wintertime wet and dry deposition in northern Michigan. Cadie, S.H., et al, [1986, p.1171-1178, eng] 41-796  
Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples. Kerimov, A.M., et al, [1985, p.71-78, rus] 41-846  
Collection of aerosol particles by snow crystals. Wang, P.K., et al, [1985, p.171-176, eng] 41-1493  
Chemical migration in mid latitude snow pack. Hogan, A.W., et al, [1985, p.243-254, eng] 41-1500  
Abnormally enriched elemental concentrations in urban snow. Drake, J.J., et al, [1985, p.255-261, eng] 41-1501  
Variations in ionic composition between High Arctic lake and land snowpack. Allan, C., et al, [1985, p.277-283, eng] 41-1505  
Spore and pollen distribution in snow on the southern slope of Elbrus Mountain. Khmelevskoi, I.F., et al, [1986, p.113-115, rus] 41-1649  
Stratospheric and tropospheric sources for nitrate in antarctic snow. Legrand, M.R., et al, [1986, p.236-249, eng] 41-1754  
Antarctic precipitation chemistry. Delmas, R.J., [1986, p.249-266, eng] 41-1843  
Influence of boreal forest cover on the chemical composition of snowcover. Jones, H.G., [1984, p.126-138, eng] 41-1953  
Design, instrumentation and operation of a snowmelt runoff plot. Goodison, B.E., et al, [1984, p.219-223, eng] 41-1963  
Tests of new snow density samplers. Granberg, H.B., et al, [1984, p.224-228, eng] 41-1964  
Nitrate flux on the Ross Ice Shelf and its relation to solar cosmic rays. Zeller, E.J., et al, [1986, p.1264-1267, eng] 41-2019  
Vegetation, soils and ground water of central and southern taiga. Stepanov, A.M., et al, [1986, p.64-72, rus] 41-2347  
Morphological and chemical data on microparticles in antarctic snows. Goldschmidt, A., [1986, p.99-103, eng] 41-2463  
Short-term variation of oxygen isotopic composition of falling snow. Fujiyoshi, Y., et al, [1986, p.353-363, eng] 41-2502  
Snow and water chemistry of lakes in northern Saskatchewan. Shewchuk, S.R., [1983, 62p., eng] 41-2578  
Interaction of snowmelt water with terrestrial portion of shield catchment. English, M.C., et al, [1986, p.27-34, eng] 41-2616  
Factors affecting snowmelt streamwater chemistry in the Black Forest (West Germany). Feger, K.H., et al, [1986, p.257-265, eng] 41-2621  
Snowmelt in a boreal forest site: an integrated model of meltwater quality (SNOQUAL1). Jones, H.G., et al, [1986, p.431-439, eng] 41-2622  
Nitrate variability in South Pole and Ross Ice Shelf snow and firn. Laird, C.M., et al, [1985, p.68-69, eng] 41-2629  
Ice core study of antarctic climatic history. Mayewski, P.A., et al, [1985, p.71-72, eng] 41-2631  
Low temperature effects on organophosphonates. Britton, K.B., [1986, 47 refs., eng] 41-3050  
Nitrate deposition in Antarctica: temporal and spatial variations. Laird, C.M., [1986, 268p., eng] 41-3155  
Changes in chemical composition of meltwater in areas of intensive human activities. Dvornikova, L.L., et al, [1986, p.60-68, rus] 41-3210  
Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., [1987, 236p., rus] 41-3270  
Water chemistry during snowmelt in a northern basin. Barry, P.J., et al, [1984, p.137-155, eng] 41-3321  
Airborne measurements of the antarctic cloud water acidity. Saxena, V.K., et al, [1985, p.201-203, eng] 41-3323  
Major inorganic ions in the North Pole snow samples. Karlsson, V., et al, [1987, p.8-13, eng] 41-3369  
Study of organochlorine pollutants in snow at North Pole. Paasivirta, J., et al, [1987, p.24-31, eng] 41-3370  
Snowmelt solutes in Adirondack region of New York. Rascher, C.M., et al, [1987, p.209-224, eng] 41-3404  
Snow chemistry of an Austrian glacier. Psenner, R., et al, [1986, p.1-18, eng] 41-3522  
Trace elements in surface snow near Shows Station. Nishikawa, M., et al, [1986, p.47-55, eng] 41-3657  
Nitrogen in two contrasting antarctic bryophyte communities. Christie, P., [1987, p.73-93, eng] 41-3795

**Snow composition (cont.)**

- Spatial variability of snowcover chemistry in a Scottish catchment. Tranter, M., et al. [1987, p.853-862, eng] **41-3889**
- Seasonal and spatial trends in south Greenland snow chemistry. Mayewski, P.A., et al. [1987, p.863-869, eng] **41-3890**
- Scavenging of atmospheric sulfate by Arctic snow. Davidson, C.I., et al. [1987, p.871-882, eng] **41-3891**
- All-Union Conference on nuclear-physical methods of environmental management, 3rd, Tomsk, May 21-23, 1985. Proceedings. [1987, 172p., rus] **41-3944**
- Content of mercury in the snow cover of Pribaykal'e. Poslovina, A.L., et al. [1987, p.56-60, rus] **41-3946**
- Studying pollutant accumulation in air, snow and vegetation. Kazachevskii, I.V., et al. [1987, p.91-102, rus] **41-3947**
- Chemical properties of snow in the northeastern United States. Kumai, M., [1987, p.(C1)625-(C1)630, eng] **41-3959**
- Regional landscape-geochemical investigations. Nechaeva, E.G., ed. [1986, 159p., rus] **41-4113**
- Geochemical evaluation of the environmental impact of human activities. Davydova, N.D., [1986, p.135-143, rus] **41-4114**
- Radiative effects of aerosol components in Arctic haze and snow. Blanchet, J.P., et al. [1987, p.293-317, eng] **41-4206**
- Snow chemistry from Xixabangma Peak, Tibet. Mayewski, P.A., et al. [1986, p.542-543, eng] **41-4312**
- Sulphuric acid in the antarctic ice sheet. Legrand, M., et al. [1987, p.671-676, eng] **41-4325**
- Preferential elution of snowfall in Scottish highlands. Tranter, M., et al. [1986, p.517-525, eng] **41-4533**
- Spatial distribution of chloride and sulfate in the snow cover in Sapporo, Japan. Suzuki, K., [1987, p.1773-1778, eng] **41-4539**
- Organic compounds in precipitation samples from southern California. Kawamura, K., et al. [1986, p.115-124, eng] **41-4540**
- Microorganisms found in Alpine soils, snow cover and streams. Dobrovol'skaia, N.G., et al. [1985, p.77-81, rus] **41-4562**
- Snow compression**
- Methods of building temporary structures from unconsolidated snow. Komarov, A.A., et al. [1986, p.80-84, rus] **41-2158**
- Constitutive theory for high rate multiaxial deformation of snow. Hansen, A.C., [1986, 148p., eng] **41-2586**
- Snow (construction material)**
- Construction of temporary winter roads and ice crossings. Titava, G.A., et al. [1986, p.13-14, rus] **41-914**
- Prospects for utilizing snow-ice resources. Kotliakov, V.M., et al. [1986, p.140-144, rus] **41-1656**
- Methods of building temporary structures from unconsolidated snow. Komarov, A.A., et al. [1986, p.80-84, rus] **41-2158**
- Methods of making artificial snow and its physical properties. Mekhov, K.S., [1986, p.84-87, rus] **41-2159**
- Snow as construction material (bibliographic review of Russian and foreign publications). Kvon, I.A.D., [1986, p.95-105, rus] **41-2162**
- Contribution of snow to ice bridges. Coutermarsh, B.A., et al. [1987, p.133-137, eng] **41-2414**
- Winter field fortifications. Farrell, D., [1986, 50p., eng] **41-3817**
- Snow cover**
- Cold region structural engineering. Eranti, E., et al. [1986, 529p., eng] **41-338**
- New instrument for determining strength profiles in snow cover. Dowd, T., et al. [1986, p.299-301, eng] **41-690**
- Trace metals in the snow of northern Sweden. Ross, H.B., et al. [1986, p.27-43, eng] **41-1260**
- Numerical evaluation of flexible footing settlement into uniform snowcover. Dandekar, B.W., et al. [1986, p.131-138, eng] **41-1284**
- New method of measuring the snow-surface temperature. Andreas, E.L., [1986, p.139-156, eng] **41-1285**
- Chemical migration in mid latitude snow pack. Hogan, A.W., et al. [1985, p.243-254, eng] **41-1500**
- East Greenland Current—ice studies. Tryde, P., [1986, p.129-136, eng] **41-1588**
- Annotated list of Soviet literature on glaciology for 1982. Kotliakov, V.M., et al. [1986, p.199-228, rus] **41-1668**
- CATCO: remote all terrain heavy transportation. Peterson, S., [1986, p.670-678, eng] **41-2050**
- Snowpack properties derived from remote sensing data. Burke, H.K., et al. [1981, 85p., eng] **41-2528**
- Effect of climate fluctuations on selected cryospheric parameters. Da Silva, C.P., [1984, 27p., eng] **41-3421**
- Remote sensing of snowpack properties by microwave radiometry. Chang, A.T.C., [1986, p.201-207, eng] **41-3898**
- Radiometric properties of snow, ice and water. Steyn-Ross, D.A., et al. [1986, p.971-980, eng] **41-3992**
- Snow and ice features shown by thematic mapper and MSS images. Orheim, O., et al. [1987, p.109-118, eng] **41-4445**

**Snow cover distribution**

- Forest fire effect on chemical composition of snow cover. Ivanov, A.V., [1986, p.180-186, rus] **41-131**
- Accuracy of calculations of snow depth in avalanche catchments. Chernous, P.A., et al. [1986, p.201-206, rus] **41-135**
- Expert system for snowmelt runoff modeling and forecasting. Engman, E.T., et al. [1986, p.174-180, eng] **41-249**
- Monte Carlo simulation of snow depth in a forest. Woo, M.-K., et al. [1986, p.864-868, eng] **41-445**
- Calculation and prediction of the regime and distribution of mountain glaciers. Tokmagambetov, G.A., et al. [1985, 159p., rus] **41-518**
- Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed. [1986, 84p., rus] **41-543**
- Macroscale model of snow cover formation in mountainous regions. Shetsis, I.D., [1986, p.15-27, rus] **41-544**
- Heliogeophysics and the control of natural environments. Danilova, A.D., ed. [1986, 192p., rus] **41-652**
- Separating the background component of snow pollution near industrial sources. Kerbi, S.B., et al. [1986, p.119-123, rus] **41-653**
- Digital mapping in polar regions from Landsat photographic products: a case study. Dowdeswell, J.A., et al. [1986, p.47-50, eng] **41-737**
- Glacier volume estimation on Cascade volcanoes. Driedger, C., et al. [1986, p.9-64, eng] **41-739**
- Composition and structure of the special data bank "Snow cover in mountains". Tsarev, B.K., [1986, p.3-10, rus] **41-770**
- Long period regime of a drifted snow field. Pertsiger, F.I., [1986, p.117-123, rus] **41-782**
- Calculating river runoff in arid and humid cold regions. Plitkin, G.A., et al. [1986, p.122-130, rus] **41-815**
- Calculating sums of global radiation on mountain slopes. Samukashvili, R.D., [1985, p.78-89, rus] **41-847**
- Identifying snow condition from LANDSAT MSS data. Birnie, R.V., [1986, p.845-853, eng] **41-854**
- Snowfall over Italian Alps. Latini, A., [1986, p.53-63, ita] **41-867**
- Winter factors in seasonal development of Alpine plants. Lynov, I.U.S., [1986, p.78-80, rus] **41-903**
- Ice and snow of the north polar caps of Mars and Earth. Foster, J., et al. [1986, p.223-235, eng] **41-959**
- Hydrology and land sciences from polar-orbiting satellite data. Matson, M., et al. [1985, 20p., eng] **41-976**
- Snow cover data, winter 1984-85. [1985, 47p., eng] **41-1037**
- Application of NOAA/TIROS satellite data to snowmelt-runoff of Heihe Basin in Qilian Mountain. Zhang, S., et al. [1986, p.119-130, chj] **41-1459**
- Recent trends in the potential role of seasonal snow cover in the CO<sub>2</sub> induced climate change. Li, P., [1986, p.176-178, chj] **41-1466**
- Snow runoff of the Transcaucasian highland. Vladimirov, L.A., et al. [1985, p.545-547, rus] **41-1624**
- Establishing periods of stable snow cover duration in mountains. Tsarev, B.K., et al. [1986, p.73-78, rus] **41-1641**
- Spore and pollen distribution in snow on the southern slope of Elbrus Mountain. Khmelevskoi, I.F., et al. [1986, p.113-115, rus] **41-1649**
- Recent glaciology of the Pekul'ney Range. Sedov, K.V., et al. [1986, p.128-130, rus] **41-1653**
- Variability of snow cover properties in medium-high mountains. Zhidkov, V.A., et al. [1986, p.150-155, rus] **41-1659**
- Problems of satellite meteorology and remote sensing. Stinikova, M.V., ed. [1986, 104p., rus] **41-1684**
- Mapping of territories with unstable snow covers. Solodkov, P.A., et al. [1986, p.82-84, rus] **41-1687**
- Natural environment and economics of Kuzbass (preprints of summaries for the conference). Udodov, V.P., ed. [1984, 164p., rus] **41-1904**
- General characteristics of avalanche formation and danger in Kuznetskiy Alatau. Shpin', P.S., [1984, p.55-57, rus] **41-1905**
- Snow loads on two-level flat roofs. Taylor, D.A., [1984, p.3-13, eng] **41-1942**
- Drift snow loads on multilevel roofs. O'Rourke, M.J., et al. [1984, p.14-25, eng] **41-1943**
- Regional differences in snowpacks in the northern U.S. as seen by the Nimbus-7 SMMR. Hall, D.K., et al. [1984, p.67-74, eng] **41-1948**
- Spatial and temporal snowcover distribution. Allen, R.V., et al. [1984, p.199-203, eng] **41-1960**
- Forecasting ice breakup dates for Siberian rivers. Liser, I.A., [1986, p.42-60, rus] **41-1965**
- Calculation of maximum annual snow reserves in river basins. Galakhov, V.P., et al. [1986, p.100-105, rus] **41-1967**
- Snow water reserves in central Altai. Chubenko, A.G., [1986, p.105-111, rus] **41-1968**
- Possible CO<sub>2</sub>-induced warming effects on the cryosphere. Barry, R.G., [1984, p.571-604, eng] **41-1973**
- Snow survey in the Qilian Mt. basin, NW China. Liu, Z.K., et al. [1986, p.1335-1340, eng] **41-2139**
- Distribution of snowstorms over the Italian Alps and weather types. Latini, A., [1986, p.8-19, ita] **41-2233**

- Glacier systems in the Soviet northeast. Krenke, A.N., et al. [1980, p.166-185, eng] **41-2343**
- Vegetation of snow patches, Gulf of Richmond, northern Quebec. Morin, H., et al. [1986, p.1515-1524, fr] **41-2367**
- Snow distribution patterns in clearings and adjacent forest. Golding, D.L., et al. [1986, p.1931-1940, eng] **41-2466**
- Satellite derived snow cover in climate diagnostics studies. Ropelewski, C.F., [1984, p.245-248, eng] **41-2590**
- Snow water reserves in taiga zone. Rubtsov, M.V., et al. [1986, p.11-16, rus] **41-2598**
- Results of studying avalanches in the Magadan region. Korenev, V.G., [1986, p.63-72, rus] **41-2650**
- Snow cover in the Canadian Arctic in July. Lauriol, B., et al. [1986, p.309-315, eng] **41-2689**
- Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes. Mitnik, L.M., et al. [1986, p.93-97, rus] **41-2720**
- Remote sensing in the study of elements of moisture supply to geosystems. Grin, A.M., ed. [1986, 113p., rus] **41-2732**
- Modeling meltwater runoff in mountain catchment areas from satellite data. Muzylev, E.L., et al. [1986, p.16-29, rus] **41-2733**
- Calculating runoff formation in catchment areas from remote sensing data. Kulikov, I.U.N., et al. [1986, p.30-36, rus] **41-2734**
- Remote sensing of heat and moisture transfer in geosystems. Kulikov, I.U.N., [1986, p.97-105, rus] **41-2736**
- Hydrological role of the Bilibaev forests. Mironov, B.A., [1986, p.73-88, rus] **41-2876**
- Snowfall over Shinjo City, Japan, 1985. Yagi, T., et al. [1986, p.9-24, jpn] **41-3006**
- Snow distribution patterns in the alpine krummholz zone. Daly, C., [1984, p.157-175, eng] **41-3139**
- Supply of snow in the Eastern Highlands of Scotland: 1954-5 to 1983-4. Davison, R.W., [1987, p.42-50, eng] **41-3147**
- Ground water regime and runoff in Siberian taiga. Konstantinov, V.D., [1986, p.14-22, rus] **41-3209**
- Changes in chemical composition of meltwater in areas of intensive human activities. Dvornikova, L.L., et al. [1986, p.60-68, rus] **41-3210**
- Nimbus 7 SMMR investigation of snowpack properties in the northern Great Plains for the winter of 1978-79. McFarland, M.J., et al. [1987, p.35-46, eng] **41-3314**
- Geographic modeling of evaporation from water-bodies of mountainous countries. Gvakharia, V.K., [1986, 114p., rus] **41-3366**
- Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains. Severskii, I.V., et al. [1986, p.29-38, rus] **41-3484**
- Report of pit-wall observations of snow cover in Sapporo. Endo, Y., et al. [1986, p.1-10, jpn] **41-3501**
- Satellite methods of studying avalanche formation. Laptev, M.N., et al. [1986, p.43-49, rus] **41-3516**
- Snow cover regime of the northern and central Kazakhstan. Petropavlovskaya, M.S., [1986, p.3-22, rus] **41-3584**
- Snow cover characteristics in agricultural fields. Kaluzhnyi, I.L., et al. [1986, p.22-37, rus] **41-3585**
- Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] **41-3742**
- Snow cover distribution in a system of young poplar strips. Zarudnyi, I.A.K., [1987, p.45-46, rus] **41-3745**
- Aspect and elevation effects on the structure of the seasonal snowcover in Colorado. Dexter, L.L., [1987, 250p., eng] **41-3800**
- Hydrologic studies in mountain forests of the U.S.S.R. Gan, P.A., ed. [1985, 172p., rus] **41-3872**
- Snow accumulation in the Khamar-Daban forests. Onuchin, A.A., [1985, p.109-119, rus] **41-3873**
- Seasonal and spatial trends in south Greenland snow chemistry. Mayewski, P.A., et al. [1987, p.863-869, eng] **41-3890**
- Hydrologic applications of space technology. Johnson, A.I., ed. [1986, 488p., eng] **41-3894**
- Snow cover mapping for runoff in an alpine basin. Baumgartner, M.F., et al. [1986, p.191-199, eng] **41-3897**
- Snow cover mapping by microwave radiometry. Hallikainen, M., et al. [1986, p.209-214, eng] **41-3899**
- Hydrological data collection, interpretation and analysis in Greenland. Thomsen, T., et al. [1986, p.273-282, eng] **41-3902**
- Satellite data input to Windy Gap computerized streamflow forecasting model. Eckhardt, J.R., et al. [1986, p.349-354, eng] **41-3905**
- SNOTEL meteor burst telemetry system. Crook, A.G., [1986, p.411-418, eng] **41-3906**
- Snow cover and dirt layer in the accumulation area of Yala Glacier, Nepal. Iida, H., et al. [1987, p.55-62, eng] **41-3916**
- Estimation of industrial emission into the atmosphere. Boiarkina, A.P., et al. [1987, p.14-23, rus] **41-3945**
- Content of mercury in the snow cover of Pribaykal'e. Poslovina, A.L., et al. [1987, p.56-60, rus] **41-3946**
- Airborne observations of terrestrial surfaces. Egan, W.G., [1986, p.501-510, eng] **41-3988**



- Remotely sensed snow cover in water supply forecasting. Shafer, B.A., [1986, p.1045-1056, eng] 41-3993
- Snow cover mapping over the Western USA. Allen, M.W., et al, [1986, p.1065-1074, eng] 41-3995
- Modelling of continental and sea ice as part of climate models. Nagurnyi, A.P., [1986, 104p., rus] 41-4092
- Geochemical evaluation of the environmental impact of human activities. Davydova, N.D., [1986, p.135-143, rus] 41-4114
- Heat balance of the non-chernozem zone of Russia. Nesmelova, E.I., et al, [1987, p.54-60, rus] 41-4168
- Snow cover formation in pine, spruce and black alder forests. Blintsov, I.K., et al, [1987, p.15-18, rus] 41-4171
- Snow redistribution: strip cuts at Yuba Pass, California. McGurk, B.J., et al, [1987, p.285-295, eng] 41-4318
- Analysis and computation of regimes of major mountain glacier systems. Krenke, A.N., [1986, p.4-9, 125-130, rus] 41-4332
- Influence of katabatic wind on snow and ice ablation. Ohata, T., [1986, p.25-29, 144-147, rus] 41-4335
- Meltwater seepage on temperate and cold glaciers. Bazhev, A.B., [1986, p.50-55, 165-170, rus] 41-4339
- Forecasting glacial runoff in river basins of Central Asia. Konovalov, V.G., [1986, p.75-78, 187-191, rus] 41-4344
- Role of major floods in glacier basins. Johnson, P.G., et al, [1986, p.82-87, 195-200, rus] 41-4346
- Nimbus-7 SMRM derived global snow cover parameters. Chang, A.T.C., et al, [1987, p.39-44, eng] 41-4432
- Pattern recognition of air photographs for estimation of snow reserves. Good, W., et al, [1987, p.76-80, eng] 41-4439
- Snow mapping and classification from Landsat thematic mapper data. Dozier, J., et al, [1987, p.97-103, eng] 41-4443
- Interpretation and utilization of areal snow-cover data from satellites. Martinec, J., et al, [1987, p.166-169, eng] 41-4452
- Satellite snow-cover monitoring and runoff in the Qilian Mts., China. Zeng, Q., et al, [1987, p.225-228, eng] 41-4464
- Adhesion of ice-snow masses to moving ships. Voevodin, V.A., [1984, p.17-19, rus] 41-4509
- Climatic atlas, including freezing precipitation. [1987, 3p. + 108p. of maps, eng] 41-4522
- Microorganisms found in Alpine soils, snow cover and streams. Dobrovolskaya, N.G., et al, [1985, p.77-81, rus] 41-4562
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernenkova, T.V., [1987, p.147-157, rus] 41-4571
- Snow cover effect**
- Characteristics of the casualties due to snow in the snowy areas. Kuriyama, H., [1986, p.79-94, jpn] 41-81
- Role of ground frost, snow cover, ice break-up and flooding in the fluvial processes of the Oulanka River, NE Finland. Koutaniemi, L., [1984, p.127-161, eng] 41-265
- Atmosphere and snow cover effects on emissive properties of ice. Pichugin, A.P., et al, [1986, p.119-123, rus] 41-703
- Under-snow radar using multifrequency holography. Sakamoto, Y., et al, [1986, p.111-118, eng] 41-853
- Synoptic-scale influences of snow cover and sea ice. Rosa, B., et al, [1986, p.1795-1810, eng] 41-988
- Benthic microalgal standing stock distribution patterns at McMurdo Sound. Dayton, P.K., et al, [1986, p.207-213, eng] 41-1015
- Seasonal environmental changes on mosses at Showa Station. Kanda, H., [1986, p.17-26, eng] 41-1043
- Storage of vegetables by the use of snow. Muramatsu, K., [1986, p.149-157, jpn] 41-1219
- Plant production and distribution in Alaskan tundra. Fox, J.F., [1985, p.199-204, eng] 41-1230
- Phytoecadaphic relationships in alpine tundra, Colorado. Eddleman, L.E., et al, [1984, p.343-359, eng] 41-1235
- Influence of sea ice and sea ice biota on light in McMurdo Sound. Sullivan, C.W., et al, [1984, p.159-165, eng] 41-1280
- Techniques to measure the spectral reflectance of ice. Bolsenga, S.J., et al, [1984, p.384-391, eng] 41-1356
- Some physical properties of snowcover on evolving first year sea ice. Crocker, G.B., et al, [1985, p.84-95, eng] 41-1487
- Meteorological and snow cover measurements at Grayling, Michigan. Bates, R.E., et al, [1985, p.212-229, eng] 41-1497
- Effects of snowpack and watershed on snowmelt runoff. McDonnell, J.J., et al, [1985, p.262-266, eng] 41-1502
- Spatial variability of lake ice covers. Bengtsson, L., [1986, p.113-121, eng] 41-1848
- Freeze thaw activity at snowpatch sites. Nyberg, R., [1986, p.207-211, eng] 41-1879
- Maintenance measures and road safety. Roine, M., et al, [1983, p.262-266, fin] 41-1934
- Effects of snow and ice on wetland water chemistry. Campbell, J., et al, [1984, p.143-147, eng] 41-1955
- Mapping of mountain hazards. Ives, J.D., [1986, p.111-124, eng] 41-1977
- Cloud/cryosphere interactions in the marginal snow and ice zones. Barry, R.G., [1984, p.605-607, eng] 41-2009
- Formulas for calculating temperature of snow-covered soils. Lugovoi, P.N., [1986, p.180-192, rus] 41-2099
- Rock glaciers. Gorbunov, A.P., et al, [1986, p.73-77, rus] 41-2535
- Chemical method of treating soils. Migliachenko, V.P., [1986, p.17-18, rus] 41-2556
- Forecasting fog dissipation time and visibility improvement with stratus conditions. Koshelenko, I.V., [1986, p.50-58, rus] 41-2637
- Atmospheric boundary layer. McBean, G., [1986, p.283-337, eng] 41-2989
- Sea ice microbial communities. 7. Changes in under-ice spectral irradiance during the developments of antarctic sea ice microbial communities. Palmisano, A.C., et al, [1987, p.165-173, eng] 41-3132
- Bacterial production in annual sea ice in McMurdo Sound. Kottmeier, S.T., et al, [1987, p.175-186, eng] 41-3133
- Snow distribution patterns in the alpine krummholz zone. Daly, C., [1984, p.157-175, eng] 41-3139
- Remote sensing and hydrologic models. Peck, E.L., et al, [1982, 179p., eng] 41-3256
- Comparison of Northern Hemisphere snow cover data sets. Scialdone, J., et al, [1987, p.53-68, eng] 41-3341
- Ecology of snow algae. Kawecka, B., [1986, p.407-415, eng] 41-3360
- Snow depth and incidence of a snowmold disease on mountain big sagebrush. Sturges, D.L., et al, [1986, p.215-221, eng] 41-3571
- Ground water formation in southern Tyumen' region. Soloboeva, L.A., [1987, p.131-136, rus] 41-3651
- Effect of snow on vehicle-generated seismic signatures. Albert, D.G., [1987, p.881-887, eng] 41-3887
- Thermal regime of upper soil layers in the Kolyma Basin. Alifimov, A.V., [1985, p.9-29, rus] 41-4119
- Heat balance of the non-chernozem zone of Russia. Nesmelova, E.I., et al, [1987, p.54-60, rus] 41-4168
- Enhanced solar radiation along coastal Hudson Bay. Rouse, W.R., [1987, p.670-674, eng] 41-4209
- Technical support for the CONUS OTH-B Experimental Radar System. Washburn, T.M., et al, [1980, 30p., eng] 41-4326
- Snow cover stability**
- Probability model of snow stability on mountain slopes. Bozhinski, A.N., et al, [1986, p.53-60, rus] 41-105
- Accuracy of calculations of snow depth in avalanche catchments. Chernous, P.A., et al, [1986, p.201-206, rus] 41-135
- Avalanches and avalanche snow loads. Moskalov, I.U.D., [1986, 157p., rus] 41-651
- Estimating snow reserves, avalanches, runoff and water balance in the Kyzylchi River basin (based on aerial photography). Gapiashko, V.G., [1986, p.19-23, rus] 41-699
- Snow cover and weather conditions. Schaffhauser, H., [1984, p.205-224, ger] 41-715
- Method of calculating the warm-up date of snow cover. Brukhanda, V.I., et al, [1986, p.10-23, rus] 41-771
- Classification of dry and wet snow avalanches. Kharitonov, G.G., [1986, p.23-32, rus] 41-772
- Multi-basin avalanche simulation: a model. Judson, A., et al, [1986, p.35-47, eng] 41-1302
- Special forecasts of avalanche danger and possibilities of controlling snow and avalanche phenomena. Bolov, V.R., [1986, p.171-176, rus] 41-1664
- Mapping of territories with unstable snow covers. Solodkov, P.A., et al, [1986, p.82-84, rus] 41-1687
- Avalanche. Strauss, W., [1985, p.26-27, eng] 41-1838
- Avalanches and meteorology in Austria, 1984/85 and 1985/86 winters. Hauk, E., et al, [1986, 90p., ger] 41-2492
- Drifting of snow in Northern Kazakhstan. Petropavlovskaya, M.S., et al, [1986, p.67-74, eng] 41-3680
- Field test to assess snow-slope stability. Conway, H., et al, [1986, p.535-537, eng] 41-4310
- Snow cover stratification**
- See: Snow stratigraphy
- Snow cover structure**
- Moisture redistribution in the snow cover of Central Yakutia. Fedoseeva, V.I., et al, [1986, p.104-107, rus] 41-115
- Method of calculating the warm-up date of snow cover. Brukhanda, V.I., et al, [1986, p.10-23, rus] 41-771
- Snow acoustic impedance model. Buser, O., [1986, p.71-92, eng] 41-1262
- Modeling the formation and melting of snow cover. Motovilov, I.U.G., et al, [1986, p.50-56, rus] 41-1637
- Problems of snow cover classification when studying its trafficability by different type vehicles. Ushakov, A.I., [1986, p.146-149, rus] 41-1658
- Special forecasts of avalanche danger and possibilities of controlling snow and avalanche phenomena. Bolov, V.R., [1986, p.171-176, rus] 41-1664
- Nimbus 7 SMRM investigation of snowpack properties in the northern Great Plains for the winter of 1978-79. McFarland, M.J., et al, [1987, p.35-46, eng] 41-3314
- Infrared measurement of free-water content and grain size of snow. Hyvärinen, T., et al, [1987, p.342-348, eng] 41-3780
- Aspect and elevation effects on the structure of the seasonal snowcover in Colorado. Dexter, L.L., [1987, 250p., eng] 41-3800
- Structure of quick hardened snow under temperature gradient. Akitaya, E., [1986, p.11-18, jpn] 41-3875
- Operation of technical equipment in freezing weather. Voloshnikov, D., et al, [1987, p.78-80, rus] 41-3933
- Fundamentals of avalanche science. Bozhinski, A.N., et al, [1987, 280p., rus] 41-4129
- Granular structure of snow: an internal-state variable approach. Hansen, A.C., et al, [1986, p.434-438, eng] 41-4298
- Microwave snow signatures (1.5 mm to 3 cm) over Alaska. Chang, A.T.C., et al, [1987, p.153-160, eng] 41-4492
- Role of fracture in the attenuation rate of stress waves in snow. Hansen, A.C., et al, [1987, p.207-212, eng] 41-4496
- Snow cover thickness**
- See: Snow depth
- Snow creep**
- Measurements of deformation in a firn pit. Ambach, W., et al, [1985, p.211-222, ger] 41-717
- Snow crystal growth**
- Three-parameter snow growth model. Lo, K.K., et al, [1982, p.197-200, eng] 41-14
- Graupel and hail production mechanisms. Heymsfield, A.J., [1982, p.453-456, eng] 41-56
- Faceted snow crystals. Hallett, J., [1987, p.581-588, eng] 41-3151
- Morphology of bullet-type snow crystals at Showa Station. Iwai, K., [1986, p.38-46, eng] 41-3656
- Improved approach to calculating terminal velocities of plate-like crystals and graupel. Heymsfield, A.J., et al, [1987, p.1088-1099, eng] 41-3853
- Simulation for growth of snowflake. Miyazima, S., et al, [1987, p.441-443, eng] 41-3968
- Grain growth in a wet arctic snow cover. Marsh, P., [1987, p.23-31, eng] 41-4213
- International Cloud Physics Conference, 9th, Tallin, 1984. [1984, 3 vols. (835p.), eng] 41-4369
- Snow production in a convective cloud. Wakahama, G., et al, [1984, p.113-116, eng] 41-4379
- Laboratory simulations of graupel growth. Griggs, D.J., et al, [1984, p.163-166, eng] 41-4382
- Numerical simulation of hail embryo growth. Levi, L., et al, [1984, p.505-508, eng] 41-4406
- Snow crystal nuclei**
- Snow-gun season. Marocchi, A., [1987, p.39-41, ita] 41-3309
- Regional characteristics of graupel formation. Harimaya, T., [1984, p.167-168, eng] 41-4383
- On the snow crystals of cold temperature types. Kikuchi, K., et al, [1984, p.169-172, eng] 41-4384
- Snow crystal structure**
- Radar observations of snow bands in Finland. Saarikivi, P., [1982, p.461-464, eng] 41-57
- Snow crystal habit and snowfall intensity. Feng, D., et al, [1982, p.485-486, eng] 41-63
- Classification of seasonal snow cover crystals. Colbeck, S.C., [1986, p.595-705, eng] 41-1028
- Special forecasts of avalanche danger and possibilities of controlling snow and avalanche phenomena. Bolov, V.R., [1986, p.171-176, rus] 41-1664
- Snow stars—messages from the sky. Olovsson, I., [1985, p.50-59, ger] 41-3078
- Faceted snow crystals. Hallett, J., [1987, p.581-588, eng] 41-3151
- Morphology of bullet-type snow crystals at Showa Station. Iwai, K., [1986, p.38-46, eng] 41-3656
- Regional characteristics of graupel formation. Harimaya, T., [1984, p.167-168, eng] 41-4383
- On the snow crystals of cold temperature types. Kikuchi, K., et al, [1984, p.169-172, eng] 41-4384
- Snow crystals**
- Composition of unrimed and rimed snow crystals. Borys, R.D., et al, [1982, p.61-62, eng] 41-4
- Collection of aerosol particles by snow crystals. Wang, P.K., et al, [1985, p.171-176, eng] 41-1493
- Cloud riming regions for snow crystals that impact mountain tops in the Colorado Rockies. Hindman, E.E., [1984, p.67-70, eng] 41-4373
- Snow deformation**
- Time of snow relaxation. Runich, A.V., [1985, p.3-7, rus] 41-837
- Deformation of snow and ice at German antarctic stations. Dörr, R., [1984, 124p., ger] 41-1272
- Numerical evaluation of flexible footing settlement into uniform snowcover. Dandekar, B.W., et al, [1986, p.131-138, eng] 41-1284
- Constitutive theory for high rate multiaxial deformation of snow. Hansen, A.C., [1986, 148p., eng] 41-2586
- Granular structure of snow: an internal-state variable approach. Hansen, A.C., et al, [1986, p.434-438, eng] 41-4298
- Role of fracture in the attenuation rate of stress waves in snow. Hansen, A.C., et al, [1987, p.207-212, eng] 41-4496
- Snow density**
- Determination of the density and wetness of snow pack. Sihvola, A., et al, [1986, p.717-721, eng] 41-851

**Snow density (cont.)**

- Numerical evaluation of flexible footing settlement into uniform snowcover. Dandekar, B.W., et al, [1986, p.131-138, eng] **41-1284**
- Natural environment and economics of Kuzbass (preprints of summaries for the conference). Udodov, V.P., ed, [1984, 184p., rus] **41-1904**
- New look at ground snow loads in Canada. Newark, M.J., [1984, p.37-48, eng] **41-1945**
- Tests of new snow density samplers. Granberg, H.B., et al, [1984, p.224-228, eng] **41-1964**
- Snow water reserves in central Altai. Chubenko, A.G., [1986, p.105-111, rus] **41-1968**
- Analysis of dielectric behavior of snow in 1.0 to 37.0 GHz frequency range. Abdelrazik, M.A., [1985, 460p., eng] **41-2583**
- Ten questions and eight answers for problems of snow and ice (continued). Kojima, K., [1987, p.19-26, jpn] **41-3755**
- Stresses in the snow cover on a mountain slope. Ohizumi, M., [1986, p.54-97, eng] **41-3846**
- Density of mixed-phase snow flow. Maeno, N., [1986, p.19-26, jpn] **41-3876**
- Density and wetness of a snow pack. Tiuri, M., et al, [1986, p.225-230, eng] **41-3901**
- Experimental study of plastic wave velocity in snow. Sato, A., [1987, p.183-196, jpn] **41-4007**
- Riiser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al, [1986, p.23-31, eng] **41-4094**
- Fundamentals of avalanche science. Bozhinskii, A.N., et al, [1987, 280p., rus] **41-4129**
- Model of the orographic enhancement of snowfall. Choularton, T.W., et al, [1984, p.609-611, eng] **41-4408**
- Casey snow runway tests, 1983-84. Russell-Head, D.S., et al, [1984, 111p., eng] **41-4527**
- Snow depth**
- Alaska snow surveys and Federal-State-Private cooperative snow surveys, Mar. 1, Apr. 1, May 1 and June 1, 1986. Clagett, G.P., [1986, 4 issues, eng] **41-363**
- Monte Carlo simulation of snow depth in a forest. Woo, M.-K., et al, [1986, p.864-868, eng] **41-445**
- Predicting forest snow water equivalent. Bergman, J.A., [1985, p.154-162, eng] **41-449**
- Snow management practices for increasing soil water reserves in frozen prairie soils. Gray, D.M., et al, [1985, p.256-263, eng] **41-452**
- Ice production in the northern Baltic proper. Stössel, A., [1985, p.261-284, eng] **41-485**
- Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed, [1986, 84p., rus] **41-543**
- Macroscale model of snow cover formation in mountainous regions. Shetsis, I.D., [1986, p.15-27, rus] **41-544**
- Corrections of snow reserve calculations from measurements. Shetsis, I.D., et al, [1986, p.27-36, rus] **41-545**
- Long period regime of a drifted snow field. Pertsiger, F.I., [1986, p.117-123, rus] **41-782**
- Winter factors in seasonal development of Alpine plants. Lynov, I.U.S., [1986, p.78-80, rus] **41-903**
- Snow cover data, winter 1984-85. [1985, 47p., eng] **41-1037**
- Formulas for calculating glacier mass balance. Xie, Z., et al, [1986, p.105-110, 223-227, eng] **41-1062**
- Simulation of snow depth in a forest. Woo, M.-K., et al, [1985, p.44-54, eng] **41-1483**
- Archive of the ice record from Knob Lake, Quebec, 1954 to present. Adams, P., et al, [1985, p.284-289, eng] **41-1506**
- Variability of snow cover properties in medium-high mountains. Zhidkov, V.A., et al, [1986, p.150-155, rus] **41-1659**
- Snow cover erosion during wind-stream flow around an obstacle. Martynenko, A.A., [1986, p.160-165, rus] **41-1661**
- Natural environment and economics of Kuzbass (preprints of summaries for the conference). Udodov, V.P., ed, [1984, 184p., rus] **41-1904**
- New look at ground snow loads in Canada. Newark, M.J., [1984, p.37-48, eng] **41-1945**
- Regional differences in snowpacks in the northern U.S. as seen by the Nimbus-7 SMMR. Hall, D.K., et al, [1984, p.67-74, eng] **41-1948**
- Observation of passive microwave emission from snowpack. Shiue, J.C., et al, [1984, p.75-85, eng] **41-1949**
- Calculation of maximum annual snow reserves in river basins. Galakhov, V.P., et al, [1986, p.100-105, rus] **41-1967**
- Trafficability of snow cover by wheeled vehicles from experimental data. Ioffe, D.I.A., et al, [1986, p.146-153, rus] **41-2168**
- Snow and avalanches in the Davos region. Föhn, P., et al, [1986, p.29-44, ger] **41-2291**
- Snowpack properties derived from remote sensing data. Burke, H.K., et al, [1981, 85p., eng] **41-2528**
- Snow water reserves in taiga zone. Rubtsov, M.V., et al, [1986, p.11-16, rus] **41-2598**
- Results of studying avalanches in the Magadan region. Korenev, V.G., [1986, p.63-72, rus] **41-2650**
- Snow cover in the Canadian Arctic in July. Lauriol, B., et al, [1986, p.309-315, eng] **41-2689**
- Using radar images of the "Kosmos-1500" satellite in studying ice cover dynamics on lakes. Mitnik, L.M., et al, [1986, p.93-97, rus] **41-2720**
- Remote sensing in the study of elements of moisture supply to geosystems. Grin, A.M., ed, [1986, 113p., rus] **41-2732**
- Modeling meltwater runoff in mountain catchment areas from satellite data. Muzylev, E.L., et al, [1986, p.16-29, rus] **41-2733**
- Calculating runoff formation in catchment areas from remote sensing data. Kulikov, I.U.N., et al, [1986, p.30-36, rus] **41-2734**
- Remote sensing of heat and moisture transfer in geosystems. Kulikov, I.U.N., [1986, p.97-105, rus] **41-2736**
- Influence of depth hoar on microwave emission from snow in northern Alaska. Hall, D.K., [1987, p.225-231, eng] **41-3033**
- Maps of technogenic thermokarst development potential. Parmuzin, S.I.U., et al, [1986, p.184-193, eng] **41-3198**
- Changes in chemical composition of meltwater in areas of intensive human activities. Dvornikova, L.L., et al, [1986, p.60-68, rus] **41-3210**
- Report of pit-wall observations of snow cover in Sapporo. Endo, Y., et al, [1986, p.1-10, jpn] **41-3501**
- Radiation measurements of snowy season in 1986 at Sapporo. Ishikawa, N., et al, [1986, p.17-23, jpn] **41-3503**
- Satellite methods of studying avalanche formation. Laptev, M.N., et al, [1986, p.43-49, rus] **41-3516**
- Snow cover regime of the northern and central Kazakhstan. Petropavlovskaya, M.S., [1986, p.3-22, rus] **41-3584**
- Numerical estimation of the effect of hydrometeorological factors on the formation of water reserves in soil. Zaretskii, I.U.A., et al, [1986, p.46-56, rus] **41-3587**
- Ground water formation in southern Tyumen' region. Soloboeva, L.A., [1987, p.131-136, rus] **41-3651**
- Snow cover distribution in a system of young poplar strips. Zarudnyi, I.A.K., [1987, p.45-46, rus] **41-3745**
- Snow accumulation in the Khmar-Daban forests. Onuchin, A.A., [1985, p.109-119, rus] **41-3873**
- Meteorological features in Langtang Valley, Nepal Himalayas, 1985-1986. Takahashi, S., et al, [1987, p.35-40, eng] **41-3913**
- Meteorological data from Langtang Valley, Nepal Himalayas. Takahashi, S., et al, [1987, p.121-128, eng] **41-3924**
- Operation of technical equipment in freezing weather. Voloshnikov, D., et al, [1987, p.78-80, rus] **41-3933**
- Heat balance of the non-chenozem zone of Russia. Nesmelova, E.I., et al, [1987, p.54-60, rus] **41-4168**
- Snow cover formation in pine, spruce and black alder forests. Blintsov, I.K., et al, [1987, p.15-18, rus] **41-4171**
- Disk camera system for automatic recording of visual data: snow depth in field plots. Alberga, A.H., et al, [1987, p.927-929, eng] **41-4230**
- Extrapolating snow measurements on the Marmot Creek Experimental Basin. Bernier, P.Y., [1986, p.83-92, eng] **41-4514**
- Ice thickness data for selected Canadian stations, 1972-1976 winters. [1976, 4 pieces, eng] **41-4595**
- Snow deterioration**
- Establishing periods of stable snow cover duration in mountains. Tsarev, B.K., et al, [1986, p.73-78, rus] **41-1641**
- Snow disposal**
- See: Snow removal
- Snow distribution**
- See: Snow cover distribution
- Snow drifts**
- See: Snowdrifts
- Snow electrical properties**
- Riming and snowflake electrification in stratiform clouds. Bauer, C.F., et al, [1982, p.568-569, eng] **41-68**
- Sensor for monitoring the dielectric constant of snow. Mätzler, C., [1984, p.97-105, ger] **41-628**
- Determination of the density and wetness of snow pack. Sihvola, A., et al, [1986, p.717-721, eng] **41-851**
- Dielectric characteristics of snow in microwave frequency. Koizumi, S., et al, [1986, p.823-825, eng] **41-1467**
- Dielectric properties of snow in the 3 to 37 GHz range. Hallikainen, M.T., et al, [1986, p.1329-1340, eng] **41-2313**
- Strong fluctuation theory for moist granular media. Stogryn, A., [1985, p.78-83, eng] **41-2322**
- Collection efficiency of charged snow crystals. Murakami, M., et al, [1985, p.1127-1137, eng] **41-2569**
- Analysis of dielectric behavior of snow in 1.0 to 37.0 GHz frequency range. Abdelrazik, M.A., [1985, 460p., eng] **41-2583**
- Relation of millimeter-wavelength backscatter to surface snow properties. Williams, L.D., et al, [1987, p.188-194, eng] **41-3318**
- Snow-cover electrical resistivity and solid precipitation in Sapporo. Mizuno, Y., [1986, p.11-15, jpn] **41-3502**
- Density of mixed-phase snow flow. Maeno, N., [1986, p.19-26, jpn] **41-3876**
- Density and wetness of a snow pack. Tiuri, M., et al, [1986, p.225-230, eng] **41-3901**
- Technical support for the CONUS OTH-B Experimental Radar System. Washburn, T.M., et al, [1980, 30p., eng] **41-4326**
- Snow erosion**
- Snow cover erosion during wind-stream flow around an obstacle. Martynenko, A.A., [1986, p.160-165, rus] **41-1661**
- Relation between the susceptibility of permafrost landscapes and topographic dissection. Klimovskii, I.V., et al, [1986, p.113-121, rus] **41-1492**
- Snow evaporation**
- Role of evaporation from snow and ice in mass balance of glaciers. Kaser, G., [1986, p.59-63, 185-188, eng] **41-1056**
- Snow sublimation temperature of the cometary nucleus. Delsemme, A.H., [1985, p.367-387, eng] **41-1712**
- Remote sensing of heat and moisture transfer in geosystems. Kulikov, I.U.N., [1986, p.97-105, rus] **41-2736**
- Geographic modeling of evaporation from water-bodies of mountainous countries. Gvakharia, V.K., [1986, 114p., rus] **41-3366**
- Snow fences**
- Avalanches with and without protective structures. Rychetnik, J., [1985, p.197-208, ger] **41-716**
- French insurance industry facing avalanche risks. Nicolet, D., [1985, p.47-52, fre] **41-863**
- Snow deflector built at the edge of a road cut. Anno, Y., [1986, p.121-129, eng] **41-1283**
- Fencing system. Deike, R.F., [1982, 14 col., eng] **41-1992**
- Building yard trials for avalanche protection structures. Menegus, F., et al, [1986, p.28-36, ita] **41-2235**
- Enigma of avalanche protection structures. Balzaretto, P., [1986, p.38-43, ita] **41-2236**
- Technico-economical aspects of elastic snow fences. Sommariva, F., [1986, p.44-55, ita] **41-2237**
- Snow-halting nets on Mt. Bondone. Fait, P., et al, [1986, p.56-61, ita] **41-2238**
- New types of foundations for snow bridges. Benussi, G., [1987, p.44-46, ita] **41-4104**
- Snow gages**
- See: Precipitation gages
- Snow hardness**
- Structure of quick hardened snow under temperature gradient. Akitaya, E., [1986, p.11-18, jpn] **41-3875**
- Snow hydrology**
- Watershed management in the eighties; proceedings. [1985, 317p., eng] **41-448**
- Simulation of airborne snow water equivalent measurement errors made over a forested watershed. Vogel, R.M., et al, [1985, p.248-255, eng] **41-451**
- Snow management at ski areas: hydrologic effects. Kattelmann, R., [1985, p.264-272, eng] **41-453**
- Glaciological investigations in 1984 at Tasersiaq and Qapiarfup sernia, West Greenland. Olesen, O.B., [1985, p.104-107, eng] **41-575**
- Snow and ice. Morris, E.M., [1985, p.153-182, eng] **41-648**
- Modeling the formation and melting of snow cover. Motovilov, I.U.G., et al, [1986, p.50-56, rus] **41-1637**
- Energy balance modelling of snowmelt in a suburban environment: a progress report. Buttle, J.M., et al, [1984, p.204-208, eng] **41-1961**
- Snow hydrology. Brechtel, H.M., [1984, p.92-93, ger] **41-2077**
- Snow/water mixture flow in a pipe. Umemura, T., et al, [1986, p.207-214, jpn] **41-2604**
- D/H ratios of snow and ground water in eastern New York State. Lawrence, J.R., [1987, p.519-521, eng] **41-3310**
- Recent research in snow hydrology. Dozier, J., [1987, p.153-161, eng] **41-3509**
- Hydrologic applications of space technology. Johnson, A.I., ed, [1986, 488p., eng] **41-3894**
- Need for improved snow-cover monitoring techniques. Rango, A., et al, [1986, p.173-179, eng] **41-3895**
- Snow cover mapping for runoff in an alpine basin. Baumgartner, M.F., et al, [1986, p.191-199, eng] **41-3897**
- Remote sensing of snowpack properties by microwave radiometry. Chang, A.T.C., [1986, p.201-207, eng] **41-3898**
- Prospects of microwave remote sensing for snow hydrology. Rott, H., [1986, p.215-223, eng] **41-3900**
- Hydrological data collection, interpretation and analysis in Greenland. Thomsen, T., et al, [1986, p.273-282, eng] **41-3902**
- NRSA experience in hydrologic applications of space technology. Ramamoorthi, A.S., [1986, p.283-286, eng] **41-3903**
- Hydrological model of snowmelt runoff. Cavadias, G., et al, [1986, p.21-30, eng] **41-4513**
- Snow ice interface**
- Some physical properties of snowcover on evolving first year sea ice. Crocker, G.B., et al, [1985, p.84-95, eng] **41-1487**

- Salt transfer from soil to snow. Kazantsev, V.A., [1984, p.151-155, rus] **41-4091**
- Contact interactions of materials with ice and snow covers. Igoshin, V.A., ed. [1984, 24p., rus] **41-4503**
- Snow impurities**
- Snow meltwater impurities from sewage effluent. Zapf-Gilje, R., et al. [1986, p.151-156, eng] **41-351**
- Trace metals in the snow of northern Sweden. Ross, H.B., et al. [1986, p.27-43, eng] **41-1260**
- Preliminary results of microbiological investigations at Mirnyy. Abzyov, S.S., et al. [1986, p.133-136, rus] **41-1270**
- Antarctic precipitation chemistry. Delmas, R.J., [1986, p.249-266, eng] **41-343**
- Nitrate flux on the Ross Ice Shelf and its relation to solar cosmic rays. Zeller, E.J., et al. [1986, p.1264-1267, eng] **41-2019**
- Morphological and chemical data on microparticles in antarctic snows. Goldschmidt, A., [1986, p.99-103, eng] **41-2463**
- Dry deposition to snow in an urban area. Dasch, J.M., et al. [1986, p.297-308, eng] **41-2478**
- Anthropogenic impact on winter surface albedo. Robinson, D.A., [1985, 398p., eng] **41-2582**
- Interaction of snowmelt water with terrestrial portion of shield catchment. English, M.C., et al. [1986, p.27-34, eng] **41-2616**
- Temporal chemical variability in acid sensitive high elevation lakes. Welch, E.B., et al. [1986, p.35-44, eng] **41-2617**
- Snowmelt acidic shock in south central Ontario. Goodison, B.E., et al. [1986, p.131-138, eng] **41-2618**
- Behavior of ionic contaminants in snowpack of Turkey Lakes watershed. Semkin, R.G., et al. [1986, p.215-221, eng] **41-2619**
- Temporal variation in aluminum speciation and concentration during snowmelt. Hendershot, W.H., et al. [1986, p.231-237, eng] **41-2620**
- Snowmelt solutes in Adirondack region of New York. Rascher, C.M., et al. [1987, p.209-224, eng] **41-3404**
- Trace elements in surface snow near Showa Station. Nishikawa, M., et al. [1986, p.47-55, eng] **41-3657**
- Antarctic terrestrial ecosystem. Walton, D.W.H., [1987, p.83-93, eng] **41-3740**
- Scavenging of atmospheric sulfate by Arctic snow. Davidson, C.I., et al. [1987, p.871-882, eng] **41-3891**
- Snow line**
- Calculation and prediction of the regime and distribution of mountain glaciers. Tokmagambetov, G.A., et al. [1985, 159p., rus] **41-518**
- Calculating mean firn line altitude of mountain glaciers. Glazyrin, G.E., et al. [1986, p.64-68, rus] **41-1639**
- Snow accumulation at the alimentation-limit altitude of Spitsbergen glaciers. Krenke, A.N., et al. [1986, p.90-93, rus] **41-1644**
- Changes in forms of mountain glaciers in the Polar Urals. Tiufin, A.S., et al. [1986, p.66-99, rus] **41-1646**
- Recent glaciation of the Pekul'ny Range. Sedov, R.V., et al. [1986, p.128-130, rus] **41-1653**
- Problems of satellite meteorology and remote sensing. Sitnikova, M.V., ed. [1986, 104p., rus] **41-1684**
- Evaluating the information content of satellite data on snow line altitude for forecasting runoff of mountain rivers in the Fergana Basin. Tsarev, B.K., [1986, p.40-50, rus] **41-1685**
- Interpolation of satellite data on seasonal snow line elevations within the mountain region limits. Tsarev, B.K., [1986, p.59-65, rus] **41-1686**
- Glacial and periglacial investigations in Skidadalum, Trollaskagi, Northern Iceland. Müller, H.-N., et al. [1986, p.1-18, eng] **41-1788**
- Remote sensing in the study of elements of moisture supply to geosystems. Grin, A.M., ed. [1986, 113p., rus] **41-2732**
- Modeling meltwater runoff in mountain catchment areas from satellite data. Muzylyev, E.L., et al. [1986, p.16-29, rus] **41-2733**
- Seasonal variation of snowline in Langtang Valley, Nepal Himalayas, 1985-1986. Morinaga, Y., et al. [1987, p.49-63, eng] **41-3915**
- Modern glaciers on the south slope of West Kunlun Mountains. Zhang, Z., et al. [1987, p.85-91, eng] **41-3919**
- Permafrost and periglacial phenomena in West Kunlun Mountains of China. Li, S., [1987, p.103-109, eng] **41-3921**
- Satellite remote sensing of Vatnajökull, Iceland. Williams, R.S., Jr., [1987, p.127-135, eng] **41-4447**
- Snow loads**
- Simulating snow loads on fabric roofs. Petersen, R.L., [1986, p.894-901, eng] **41-100**
- Wind, earthquake, snow, and hail loads on solar collectors. Cattaneo, L., et al. [1981, 88p., eng] **41-173**
- Proposed code provisions for drifted snow loads. O'Rourke, M., et al. [1986, p.2080-2092, eng] **41-405**
- Strain rate measurements on a firm pit, Austria. Eisner, H., et al. [1984, p.169-176, eng] **41-633**
- Avalanches and avalanche snow loads. Moskalev, I.U.D., [1986, 157p., rus] **41-651**
- Snow damage to trees in NE Japan. Tsukahara, H., et al. [1984, p.133-138, eng] **41-708**
- Tree deformation due to snow pressure. Taira, H., [1984, p.139-147, eng] **41-709**
- Multi-basin avalanche simulation: a model. Judson, A., et al. [1986, p.35-47, eng] **41-1302**
- Analysis of snow loads due to drifting on multilevel roofs. Speck, R.S., Jr., [1985, p.157-170, eng] **41-1492**
- Snow loads on two-level flat roofs. Taylor, D.A., [1984, p.3-13, eng] **41-1942**
- Drift snow loads on multilevel roofs. O'Rourke, M.J., et al. [1984, p.14-25, eng] **41-1943**
- Automated data acquisition for structural snow loads. Sack, R.L., et al. [1984, p.26-36, eng] **41-1944**
- New look at ground snow loads in Canada. Newark, M.J., [1984, p.37-48, eng] **41-1945**
- Probabilistic models for ground snow accumulation. Ellingwood, B., [1984, p.49-58, eng] **41-1946**
- Ground snow loads for Idaho. Sack, R.L., et al. [1984, p.59-63, eng] **41-1947**
- Wood damage accumulation by stochastic load models. Corotis, R.B., et al. [1986, p.2402-2415, eng] **41-2222**
- Serviceability limit states: deflection. Galambos, T.V., et al. [1986, p.67-84, eng] **41-2532**
- Structural load estimates from geographically sparse data. Tallin, A., et al. [1987, p.628-632, eng] **41-3406**
- Snow loads in Alaska. Leslie, L.D., et al. [1987, 42p., eng] **41-3423**
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al. [1986, 328p., rus] **41-3664**
- Stress in a wavy snow cover on a plane slope. Yoshida, Z., et al. [1986, p.27-36, jpn] **41-3877**
- Sloped roof snow loads using simulation. Sack, R.L., et al. [1987, p.1820-1833, eng] **41-4173**
- Modeling of snow-block impact on structures. Mead, L.B., et al. [1986, p.321-324, eng] **41-4283**
- Snow manufacturing**
- Methods of making artificial snow and its physical properties. Mekhov, K.S., [1986, p.84-87, rus] **41-2159**
- See also: Artificial snow
- Snow mechanics**
- Snowdrift models. Irwin, P.A., et al. [1985, p.4-11, eng] **41-334**
- Avalanches in the Niigata Prefecture, Japan, 1986. Kobayashi, S., [1986, p.87-91, jpn] **41-442**
- Snow damage to trees in NE Japan. Tsukahara, H., et al. [1984, p.133-138, eng] **41-708**
- Effect of snow-cover blasting on erosion. Bunza, G., et al. [1984, p.181-190, ger] **41-713**
- Powder snow avalanche in the Niigata Prefecture, 1986. Izumi, K., et al. [1986, p.168-170, jpn] **41-1221**
- Deformation of snow and ice at German antarctic stations. Dörr, R., [1984, 124p., ger] **41-1272**
- Motion resistance of avalanches on smooth paths. Glendne, B., [1986, p.115-119, eng] **41-1282**
- Snowdrifting: a review of modelling methods. Kind, R.J., [1986, p.217-228, eng] **41-1290**
- Multi-basin avalanche simulation: a model. Judson, A., et al. [1986, p.35-47, eng] **41-1302**
- What triggers an avalanche. Marbouty, D., [1986, p.125-142, eng] **41-1978**
- Snow as construction material (bibliographic review of Russian and foreign publications. Kvon, I.A.D., [1986, p.95-105, rus] **41-2162**
- Model for flow avalanches. Hutter, K., et al. [1986, p.87-112, eng] **41-3300**
- Effects of free water on snow gliding. McClung, D.M., et al. [1987, p.6301-6309, eng] **41-3644**
- Density of mixed-phase snow flow. Maeno, N., [1986, p.19-26, jpn] **41-3876**
- Stress in a wavy snow cover on a plane slope. Yoshida, Z., et al. [1986, p.27-36, jpn] **41-3877**
- On the denudation of surface avalanche. Yamada, Y., [1987, p.115-131, jpn] **41-4004**
- Rheological properties of temperate firn. Ambach, W., et al. [1985, p.71-77, eng] **41-4130**
- Sloped roof snow loads using simulation. Sack, R.L., et al. [1987, p.1820-1833, eng] **41-4173**
- Snow melting**
- On the melting of graupel and frozen raindrops. Johnson, D.B., et al. [1982, p.384-387, eng] **41-41**
- Deep OC isothermal layers within precipitation bands. Stewart, R.E., [1982, p.570-571, eng] **41-69**
- Snow melter. Muhammad, C.C., [1983, 8 col., eng] **41-479**
- Melting process in ice-air composite materials. Aoki, K., et al. [1986, p.2138-2144, eng] **41-532**
- Mesoscale circulations initiated by melting snow. Lin, C.A., et al. [1986, p.13,299-13,302, eng] **41-1026**
- Snow melt and surface albedo in the Arctic Basin. Robinson, D.A., et al. [1986, p.945-948, eng] **41-1215**
- Modeling the formation and melting of snow cover. Motovilov, I.U.G., et al. [1986, p.50-56, rus] **41-1637**
- Method of preparing snow and ice control compositions. Stockel, R.F., [1983, 6 col., eng] **41-1776**
- Snow hydrology. Brechtel, H.M., [1984, p.92-93, ger] **41-2077**
- Snow water reserves in taiga zone. Rubtsov, M.V., et al. [1986, p.11-16, rus] **41-2598**
- On the width and motion of a rain/snow boundary. Stewart, R.E., et al. [1987, p.343-350, eng] **41-2651**
- Modeling the process of water yield from snow cover. Pan'va, E.I., et al. [1986, p.37-46, rus] **41-3586**
- Ten questions and eight answers for problems of snow and ice (continued). Kojima, K., [1987, p.19-26, jpn] **41-3755**
- Melting of snowflakes in the atmosphere. Matsuo, T., [1984, p.279-281, eng] **41-4400**
- See also: Snowmelt
- Snow metal friction**
- See: Metal snow friction
- Snow metamorphism**
- See: Metamorphism (snow)
- Snow morphology**
- Avalanche atlas: illustrated international avalanche classification. [1981, 265p., eng] **41-1158**
- Snow optics**
- Scattering at mm wavelengths from *in situ* snow. Walsh, J., et al. [1986, p.1.6.1-1.6.2, eng] **41-295**
- Numerical modeling of optical features of falling snow. Martinez-Sanchez, M., et al. [1983, p.78-85, eng] **41-2314**
- Analytical model for assessing atmospheric effects in remote sensing. Li, S., [1986, 151p., eng] **41-2585**
- Variable effects on spectral response of simulated balsam fir canopies. Ranson, K.J., et al. [1986, p.649-658, eng] **41-2739**
- Enhancing Landsat data acquired under very low illumination. Miller, J.M., et al. [1986, p.801-807, eng] **41-2741**
- Measurements of refractive index spectra over snow. Andreas, E.L., [1986, p.248-260, eng] **41-2984**
- Study of atmospheric radiative transfer process with Arctic application. Tsay, S.-C., [1987, 266p., eng] **41-3799**
- Problems of determining snow albedo for the High Arctic. Dubreuil, M.A., et al. [1984, p.379-386, eng] **41-4535**
- Snow pellets**
- Simulation of orographic clouds with a nonlinear, time-dependent model. Cotton, W.R., et al. [1982, p.322-324, eng] **41-24**
- Case studies of ice distribution in hurricanes. Black, R.A., et al. [1982, p.335-337, eng] **41-28**
- Sensitivity to cloud microphysical processes. Cotton, W.R., et al. [1982, p.358-361, eng] **41-34**
- Graupel characteristics in relation to the dynamics of Florida cumuli. Walsh, P.A., et al. [1982, p.362-365, eng] **41-35**
- On the melting of graupel and frozen raindrops. Johnson, D.B., et al. [1982, p.384-387, eng] **41-41**
- Cloud particles near melting layer. Kropfli, R.A., et al. [1982, p.412-415, eng] **41-46**
- Graupel and hail production mechanisms. Heymsfield, A.J., [1982, p.453-456, eng] **41-56**
- Riming and snowflake electrification in stratiform clouds. Bauer, C.F., et al. [1982, p.568-569, eng] **41-68**
- Is sleet a contact nucleation phenomenon. Hogan, A.W., [1985, p.290-294, eng] **41-1507**
- Quantitative prediction of secondary ice production rates. Harris-Hobbs, R.L., et al. [1987, p.1071-1082, eng] **41-3852**
- Improved approach to calculating terminal velocities of plate-like crystals and graupel. Heymsfield, A.J., et al. [1987, p.1088-1099, eng] **41-3853**
- Microphysical structures of hailstones observed on the Xizang plateau. Guo, E., [1984, p.91-94, eng] **41-4377**
- Formation of frozen drops, conglomerates, and graupel. Parungo, F.P., et al. [1984, p.103-105, eng] **41-4378**
- Laboratory simulations of graupel growth. Griggs, D.J., et al. [1984, p.163-166, eng] **41-4382**
- Regional characteristics of graupel formation. Harimaya, T., [1984, p.167-168, eng] **41-4383**
- Collection efficiencies of soft-hail pellets for ice crystals. Saunders, C.P.R., et al. [1984, p.177-178, eng] **41-4386**
- Microphysical origin of graupel and hail. Fukuta, N., et al. [1984, p.257-260, eng] **41-4395**
- Microphysical conditions of hail formation in clouds. Tisov, M.I., et al. [1984, p.287-290, eng] **41-4402**
- Numerical simulation of hail embryo growth. Levi, L., et al. [1984, p.505-508, eng] **41-4406**
- Effects of topographic variations on the generation of aggregate snowflakes. Cotton, W.R., et al. [1984, p.613-616, eng] **41-4409**
- Snow physics**
- Simple model of stratified precipitation for scavenging studies. Molenkamp, C.R., [1982, p.63-65, eng] **41-5**
- Wave propagation and remote sensing. Pre-print volume. [1986, 10 chapters, eng] **41-94**
- Mm wave backscatter from snow on the surface at 3.5 and 94 GHz. Trostel, J.M., et al. [1986, p.6.3.1-6.3.5, eng] **41-98**
- Millimeter wave propagation in snow, rain and fog. Patterson, E.M., et al. [1986, p.6.5.1-6.5.4, eng] **41-99**
- Probability model of snow stability on mountain slopes. Bozhinskii, A.N., et al. [1986, p.53-60, rus] **41-105**
- Institute of Northern Engineering, 1985-1986 report. [1986, 48p., eng] **41-364**
- Reports of several international and domestic symposia. Kurida, T., et al. [1986, p.93-112, jpn] **41-443**

**Snow physics (cont.)**

- Snow physics, avalanches, mudflows. Bolov, V.R., ed. (1985, 108p., rus) **41-836**
- Time of snow relaxation. Runich, A.V., (1985, p.3-7, rus) **41-837**
- Electromagnetic irradiance during avalanche movement. Mikhnevski, N.D., et al, (1985, p.31-34, rus) **41-841**
- Snow acoustic impedance model. Buser, O., (1986, p.71-92, eng) **41-1262**
- Some physical properties of snowcover on evolving first year sea ice. Crocker, G.B., et al, (1985, p.84-95, eng) **41-1487**
- Meteorological and snow cover measurements at Grayling, Michigan. Bates, R.E., et al, (1985, p.212-229, eng) **41-1497**
- Soviet glaciological studies in 1985. Kotliakov, V.M., et al, (1986, p.3-10, rus) **41-1632**
- Subsurface heating and melting of snow and ice. Krass, M.S., et al, (1986, p.27-38, rus) **41-1634**
- Modeling the formation and melting of snow cover. Motovilov, I.U.G., et al, (1986, p.50-56, rus) **41-1637**
- Variability of snow cover properties in medium-high mountains. Zhidkov, V.A., et al, (1986, p.150-155, rus) **41-1659**
- Calculating snow-transfer volumes during snowstorms. Diunin, A.K., et al, (1986, p.155-160, rus) **41-1660**
- Special forecasts of avalanche danger and possibilities of controlling snow and avalanche phenomena. Bolov, V.R., (1986, p.171-176, rus) **41-1664**
- Methods of making artificial snow and its physical properties. Mekhov, K.S., (1986, p.84-87, rus) **41-2159**
- Snow as construction material (bibliographic review of Russian and foreign publications. Kvon, I.A.D., (1986, p.95-105, rus) **41-2162**
- Thermophysics of glaciers. Zotikov, I.A., (1986, 275p., eng) **41-2565**
- Results of studying avalanches in the Magadan region. Korenev, V.G., (1986, p.63-72, rus) **41-2650**
- MIZEX 84 ice surface measurements from the FS Polarstern. Burns, B.A., et al, (1986, p.30-40, eng) **41-3057**
- Theory of cryogenic and glaciogenic hydrochemical processes. Ivanov, A.V., (1987, 236p., rus) **41-3270**
- Snow loads in Alaska. Leslie, L.D., et al, (1987, 42p., eng) **41-3423**
- Radiation measurements of snowy season in 1986 at Sapporo. Ishikawa, N., et al, (1986, p.17-23, jpn) **41-3503**
- Sloped roof snow loads using simulation. Sack, R.L., et al, (1987, p.1820-1833, eng) **41-4173**
- Microwave snow signatures (1.5 mm to 3 cm) over Alaska. Chang, A.T.C., et al, (1987, p.153-160, eng) **41-4492**
- Experimental study on the initiation of blowing snow. Kobayashi, S., et al, (1985, p.195-200, jpn) **41-4588**
- Activities of the Research Institute for Hazards in Snowy Areas, Japan. (1985, p.127-160, jpn) **41-4594**
- Snow recrystallization**  
See also: Metamorphism (snow)
- Snow removal**  
Countermeasures against damage by heavy snowfall in Nagano District. Tsuchiya, Y., (1985, p.9-12, jpn) **41-177**
- Countermeasures against damage by heavy snowfall in Seikan Ship Bureau. Sakakibara, H., (1985, p.13-15, jpn) **41-178**
- Countermeasures against damage by heavy snowfall in Akita District. Iwasawa, S., (1985, p.16, jpn) **41-179**
- Countermeasures against damage by heavy snowfall in Yonago District. Takahashi, T., (1985, p.17-18, jpn) **41-180**
- Countermeasures against damage by heavy snowfall in Kinki Nippon railways. Fukuda, K., (1985, p.19-20, jpn) **41-181**
- Snow and ice removal from railroad switches in Europe. Takakuwa, Y., (1985, p.21-25, jpn) **41-182**
- Countermeasures for ice and snow accumulation on transmission lines. Asai, S., (1985, p.26-27, jpn) **41-183**
- Countermeasures against damage by snowfall on distribution cable arrester. (1985, p.41-43, jpn) **41-186**
- Weather forecasting—a tool for winter snow and ice control on roads. List, C., (1979, 20p., eng) **41-235**
- Performance of two ice-retardant overlays. Tanski, J.H., (1986, 42p., eng) **41-248**
- Winter service in Steiermark, Austria. Dirnböck, G., (1985, p.17-21, ger) **41-386**
- Winter service on main-street network in Slovenia. Ocvirk, R., (1985, p.31-35, ger) **41-387**
- Optimization of the winter service in Rheinland-Pfalz. Rude, B.J., (1985, p.41-46, ger) **41-389**
- Development and use of a new melting agent. Washüttel, J., (1985, p.49-57, ger) **41-390**
- Net craning-up method for snow removal. Muramatsu, K., (1986, p.83-85, jpn) **41-441**
- Snow removal from roads by water flow in drains. Watanabe, Z., (1986, p.141-148, jpn) **41-1218**
- Ramp de-icing. (1975, 16p., eng) **41-1761**
- Expansion joint snowplow deflector. Puccio, G.S., (1983, 4 col., eng) **41-1772**

- Snow thrower with dual controls. Krug, C.C., (1983, 4 col., eng) **41-1774**
- Snow research started. Palosuo, E., et al, (1983, p.59-60, fin) **41-1933**
- Developing machines and equipment for winter road maintenance. Tampon, T., (1983, p.268-269, fin) **41-1935**
- Snow-dumping places and snow transport. Karcoja, T., (1983, p.274-278, fin) **41-1936**
- Snow caster having ring gear and spur gear drive means. Schlapman, W.J., (1983, 8 col., eng) **41-1984**
- Electric heater-blower apparatus for removing frost and snow from vehicle windows. Stephens, W.S., III, (1982, 6 col., eng) **41-1996**
- Focus on snow and ice control. (1986, p.30-31, eng) **41-2310**
- Units and vehicles for spreading de-icing agents. Kotte, G., (1986, p.12-16, eng) **41-2326**
- Introduction to the International Winter Road Congress, 1986. Suonio, V., (1986, p.32-34, eng) **41-2486**
- Winter serviceability in PIARC member countries. Lannoy, H. de, (1986, p.35-48, eng) **41-2487**
- Traffic safety, service quality and road maintenance. Rudolfsson, A., (1986, p.49-77, eng) **41-2488**
- Exhibition and demonstration of equipment. Hintikka, J., (1986, p.78-81, eng) **41-2489**
- Huzzahs for city's snowfighting program. Langseth, R.L., (1986, p.64-65, eng) **41-2701**
- Snow removal equipment, snowplows, road cleaning machines. Teklin, V.G., (1986, 232p., rus) **41-3011**
- Measurements of the snow fraction in a snow/water mixture flow in a pipe. Shirakashi, M., et al, (1986, p.2156-2160, eng) **41-3407**
- Managing budgets for snow control. Fisher, K.J., (1987, p.28-37, eng) **41-3415**
- New ice repellent coating system using polymers. Ohishi, F., et al, (1987, p.9-17, jpn) **41-3754**
- Concentration and flux of wind-blown snow. Mellor, M., et al, (1986, 16p., eng) **41-3928**
- Snow removal in cities, a big problem also in the Soviet Union. Dedul, A., (1987, p.18-20, ita) **41-4101**
- Snow emergency: vehicles occasionally equipped with a snow removal blade. Battistoni, R., et al, (1987, p.21-25, ita) **41-4102**
- Spring: time to demonstrate methods of snow removal. Bilotta, A., (1987, p.26-34, ita) **41-4103**
- Ski areas and roads protected by precautionary defense from avalanches. Minetti, G., (1987, p.47-50, ita) **41-4105**
- Hydraulic conveying of snow. Tokunaga, Y., et al, (1987, p.59-66, jpn) **41-4320**
- Snow retention**  
Structural basis of snow-retention efficiency of forest strips. Kolomiets, V.A., (1986, p.94-97, rus) **41-3261**
- Snow cover regime of the northern and central Kazakhstan. Petropavlovskaya, M.S., (1986, p.3-22, rus) **41-3584**
- Snow cover characteristics in agricultural fields. Kaliuzhnyi, I.L., et al, (1986, p.22-37, rus) **41-3585**
- Drifting of snow in Northern Kazakhstan. Petropavlovskaya, M.S., et al, (1986, p.67-74, eng) **41-3680**
- Snow cover distribution in a system of young poplar strips. Zarudnyi, I.A.K., (1987, p.45-46, rus) **41-3745**
- Protective forest strips in cold dry steppes. Lamin, L.A., (1985, p.79-87, rus) **41-3981**
- Snow roads**  
Caterpillar and wheeled hauling-tractors. Platonov, V.F., et al, (1986, 295p., rus) **41-1688**
- Reinforcement of ice bridges over rivers via layer-by-layer ice buildup. Vislobitskii, P.A., et al, (1986, p.63-70, eng) **41-1855**
- Operation of light air cushion vehicle at McMurdo Sound. Dibbern, J.S., (1987, 139p., eng) **41-2257**
- Transportation of heavy blocks on ice-snow roads. Rastorguev, G.A., et al, (1986, p.13-14, rus) **41-2780**
- Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, (1986, 328p., rus) **41-3664**
- Casey snow runway data report, 1983-84. Russell-Head, D.S., et al, (1984, 98p., eng) **41-4526**
- Casey snow runway tests, 1983-84. Russell-Head, D.S., et al, (1984, 111p., eng) **41-4527**
- Casey snow runway meteorological records, 1984. Russell-Head, D.S., et al, (1987, 98p., eng) **41-4528**
- Snow rubber friction**  
See: Rubber snow friction
- Snow samplers**  
Studying the formation of glacier pollution. Field instruments for taking ice and aerosol samples. Kerimov, A.M., et al, (1985, p.71-78, rus) **41-846**
- Tests of new snow density samplers. Granberg, H.B., et al, (1984, p.224-228, eng) **41-1964**
- All-Union Conference on nuclear-physical methods of environmental management. 3rd, Tomsk, May 21-23, 1985. Proceedings. (1987, 172p., rus) **41-3944**
- Estimation of industrial emission into the atmosphere. Boiarkina, A.P., et al, (1987, p.14-23, rus) **41-3945**

**Snow slides**

- Use of microcomputer system for snow slide measurements. Lackinger, G., (1985, p.223-226, ger) **41-718**
- Snow control for sloped glazing—an energy penalty. Schuyler, G.D., et al, (1986, p.453-448, eng) **41-1382**
- Model of snow glide acceleration to full depth avalanche release. Nohguchi, Y., et al, (1986, p.169-180, jpn) **41-3008**
- Effects of free water on snow gliding. McClung, D.M., et al, (1987, p.6301-6309, eng) **41-3644**
- Cold regions roof design. Tobiasson, W., (1987, p.457-458, eng) **41-4277**
- Snow stabilization**  
Snow cover characteristics in agricultural fields. Kaliuzhnyi, I.L., et al, (1986, p.22-37, rus) **41-3585**
- See also: Snow cover stability
- Snow stratigraphy**  
Chemical migration in mid latitude snow pack. Hogan, A.W., et al, (1985, p.243-254, eng) **41-1500**
- Observation of passive microwave emission from snowpack. Shiue, J.C., et al, (1984, p.75-85, eng) **41-1949**
- Nitrate deposition in Antarctica; temporal and spatial variations. Laird, C.M., (1986, 268p., eng) **41-3155**
- Snow strength**  
Probability model of snow stability on mountain slopes. Bozhinski, A.N., et al, (1986, p.53-60, rus) **41-105**
- New instrument for determining strength profiles in snow cover. Dowd, T., et al, (1986, p.299-301, eng) **41-690**
- Vane shear strength of snow. Kuriyama, H., et al, (1986, p.133-140, jpn) **41-1217**
- Determining strength characteristics of loose snow. Samolov, R.S., (1985, p.101-103, eng) **41-1689**
- Trafficability of snow cover by wheeled vehicles from experimental data. Ioffe, D.I.A., et al, (1986, p.146-153, rus) **41-2168**
- Stresses in the snow cover on a mountain slope. Oh'izumi, M., (1986, p.54-97, eng) **41-3846**
- Field test to assess snow-slope stability. Conway, H., et al, (1986, p.535-537, eng) **41-4310**
- Snow structure**  
See: Snow cover structure
- Snow surface**  
Sound propagation above snow-covered and ground surfaces. McDaniel, O.H., et al, (1986, 59p., eng) **41-242**
- Avalanche atlas: illustrated international avalanche classification. (1981, 265p., eng) **41-1158**
- Roughness and transfer coefficients over snow and sea ice. Andreas, E.L., (1986, 19p., eng) **41-1263**
- Effect of orographic shading on satellite imagery of snow and ice. McGuffie, K., et al, (1986, p.1359-1365, eng) **41-2140**
- Theory for scalar roughness and transfer coefficients over snow and ice. Andreas, E.L., (1987, p.159-184, eng) **41-2364**
- Distribution of depth hoar in Honshu, Japan. Izumi, K., et al, (1986, p.198-206, jpn) **41-2603**
- Discrimination of different arctic snow and sea ice surfaces. Welsh, J.P., et al, (1986, p.31-56, eng) **41-2654**
- JARE-27 field report, Sör Rondane Mountains, 1986. Moriaki, K., et al, (1986, p.246-281, jpn) **41-2695**
- Relation of millimeter-wavelength backscatter to surface snow properties. Williams, L.D., et al, (1987, p.188-194, eng) **41-3318**
- Scientific challenges at the poles. Welch, J.P., et al, (1987, p.23-26, eng) **41-3408**
- Albedo and heat balance of oil-polluted ice-snow surfaces. Izmailov, V.V., et al, (1986, p.117-120, rus) **41-3869**
- Friction on snow of ski soles, unwaxed and waxed. Shimbo, M., (1971, p.99-112, eng) **41-3907**
- See also: Glacier surfaces
- Snow surface temperature**  
Aerosol transport processes in the Antarctic. Hogan, A.W., et al, (1985, p.205-206, eng) **41-3324**
- Snow survey tools**  
Infrared measurement of free-water content and grain size of snow. Hyvärinen, T., et al, (1987, p.342-348, eng) **41-3780**
- Disk camera system for automatic recording of visual data: snow depth in field plots. Alberga, A.H., et al, (1987, p.927-929, eng) **41-4230**
- Snow surveys**  
Accuracy of calculations of snow depth in avalanche catchments. Chernous, P.A., et al, (1986, p.201-206, rus) **41-135**
- Methods of compiling medium-scale maps of genetic avalanche types. Dziuba, V.V., et al, (1986, p.206-211, rus) **41-136**
- Experience in compiling and using complex engineering glaciological maps. Osokin, N.I., et al, (1986, p.213-219, rus) **41-137**
- Alaska snow surveys and Federal-State-Private cooperative snow surveys, Mar. 1, Apr. 1, May 1 and June 1, 1986. Clagett, G.P., (1986, 4 issues, eng) **41-363**
- Macroscale model of snow cover formation in mountainous regions. Shestis, I.D., (1986, p.15-27, rus) **41-344**



- Corrections of snow reserve calculations from measurements. Shentais, I.D., et al, [1986, p.27-36, rus] **41-545**
- Avalanches and avalanche snow loads. Moskalev, I.U.D., [1986, 157p., rus] **41-651**
- Symposium on Glacier Mapping and Surveying, Reykjavik, 1985. [1986, 216p., eng] **41-727**
- Mapping glacio-nival systems of snow and ice resources. Kotliakov, V.M., et al, [1986, p.111-116, eng] **41-751**
- Methods of measuring elastic wave parameters in snow samples. Bagov, M.M., [1985, p.7-14, rus] **41-838**
- Avalanche atlas: illustrated international avalanche classification. [1981, 265p., eng] **41-1158**
- Ten questions and eight answers for problems of snow and ice. Kojima, K., [1986, p.159-167, jpn] **41-1220**
- Eastern Snow Conference, 42nd, 1985. [1985, 303p., eng] **41-1479**
- Development and roles of the Eastern Snow Conference. Adams, P., et al, [1985, p.1-24, eng] **41-1480**
- Snow and ice in Inuit place names in the eastern Canadian Arctic. Muller-Wille, L., [1985, p.55-57, eng] **41-1484**
- Microwave remote sensing—active and passive. Ulaby, F.T., et al, [1981, 2162p. (3 vols.), eng] **41-1508**
- Calculating snow-transfer volumes during snowstorms. Diunin, A.K., et al, [1986, p.155-160, rus] **41-1560**
- Eastern Snow Conference, 41-st, 1984. [1984, 248p., eng] **41-1941**
- Spatial and temporal snowcover distribution. Allen, P.V., et al, [1984, p.199-203, eng] **41-1960**
- Snow survey in the Qilian Mt. basin, NW China. Liu, Z.K., et al, [1986, p.1335-1340, eng] **41-2139**
- Trafficability of snow cover by wheeled vehicles from experimental data. Ioffe, D.I.A., et al, [1986, p.146-153, rus] **41-2168**
- Snow and avalanches in the Swiss Alps, winter 1984-85. [1986, 172p., ger] **41-2290**
- Snow and avalanche conditions in the Swiss Alps. Gliott, S., et al, [1986, p.45-106, ger] **41-2292**
- Estimating avalanche formation danger and preventive triggering. Vlasov, E.V., et al, [1986, p.53-54, rus] **41-2559**
- Yearbook of the Norwegian Polar Research Institute, 1985. [1985, p.12-15, eng] **41-2888**
- Ground water regime and runoff in Siberian taiga. Konstantinov, V.D., [1986, p.14-22, rus] **41-3209**
- Alaska snow surveys and Federal-state-private cooperative snow surveys. [1987, 3 pieces, eng] **41-3313**
- Alaska snow surveys, 1986 annual data summary. [1986, 17p. + map, eng] **41-3355**
- Huurre expedition to the North Pole in 1984. Nordlund, O.P., ed, [1987, 52p., eng] **41-3368**
- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed, [1986, 192p., rus] **41-3513**
- Satellite methods of studying avalanche formation. Laptev, M.N., et al, [1986, p.43-49, rus] **41-3516**
- Ground water naleds, central BAM. Delfin, B.N., et al, [1986, p.86-94, rus] **41-3520**
- Snow cover regime of the northern and central Kazakhstan. Petropavlovskaya, M.S., [1986, p.3-22, rus] **41-3584**
- Science and public policy: program and abstracts of the conference. [1984, 251p., eng] **41-3615**
- Hydrological investigations in the Mimer River basin, Svalbard, in 1983. Gokhman, V.V., et al, [1986, p.309-316, eng] **41-3622**
- Protection of roads from snow avalanches. Diunin, A.K., et al, [1987, 61p., rus] **41-3734**
- Ten questions and eight answers for problems of snow and ice (continued). Kojima, K., [1987, p.19-26, jpn] **41-3755**
- Summaries of the International Symposium on Remote Sensing of Environment, 18th. [1985, 251p., eng] **41-3962**
- International Symposium on Remote Sensing of Environment, 19th, 1985. [1986, 1101p. (2 vols.), eng] **41-3985**
- Geochemical evaluation of the environmental impact of human activities. Davydova, N.D., [1986, p.135-143, rus] **41-4114**
- Fundamentals of avalanche science. Bozhinski, A.N., et al, [1987, 280p., rus] **41-4129**
- Synthetic aperture radar for snow and glacier surveying. Rott, H., et al, [1987, p.195-199, eng] **41-4457**
- Outline of the studies on the system of snow-melt of the Joetsu-Shinkansen. Nakamata, S., [1985, p.1-6, jpn] **41-4584**
- Organization and activities of the Research Institute for Hazards in Snowy Areas, Niigata University. [1985, p.223-255, jpn] **41-4589**
- United States Arctic Research Plan. [1987, 334p., eng] **41-4597**
- Snow temperature**
- Method of calculating the warm-up date of snow cover. Brukhanda, V.I., et al, [1986, p.10-23, rus] **41-771**
- New method of measuring the snow-surface temperature. Andreev, E.L., [1986, p.139-156, eng] **41-1285**
- Riiser-Larsen's absolute movements, mass balance and snow temperature. Gjessing, Y., et al, [1986, p.23-31, eng] **41-4094**
- Snow thermal properties**
- Heat transfer in frost and snow. Auracher, H., [1978, p.25-30, eng] **41-466**
- Survival of the meadow vole in a snow cover. Kalliomaki, N.M., et al, [1984, p.153-164, eng] **41-1957**
- Aerosol transport processes in the Antarctic. Hogan, A.W., et al, [1985, p.205-206, eng] **41-3324**
- Snow vehicles**
- Vehicular transport at McMurdo. Dibbern, J.S., [1986, 31p., eng] **41-638**
- Problems of snow cover classification when studying its trafficability by different type vehicles. Ushakov, A.I., [1986, p.146-149, rus] **41-1658**
- Operating of the Antarctic icebreaker *Shirase* and traverse by snow vehicle. Ishizawa, K., [1986, p.563-578, eng] **41-2046**
- Operation of light air cushion vehicle at McMurdo Sound. Dibbern, J.S., [1987, 139p., eng] **41-2257**
- JARE-27 field report, Sör Rondane Mountains, 1986. Moriaki, K., et al, [1986, p.246-281, jpn] **41-2695**
- Assessment of a small snowmobile for long-distance unsupported travel. Oszceviski, R.J., et al, [1987, p.597-601, eng] **41-3859**
- Snow water content**
- Moisture redistribution in the snow cover of Central Yakutia. Fedoseeva, V.I., et al, [1986, p.104-107, rus] **41-115**
- Alaska snow surveys and Federal-State-Private cooperative snow surveys, Mar. 1, Apr. 1, May 1 and June 1, 1986. Clagett, G.P., [1986, 4 issues, eng] **41-363**
- Sensor for monitoring the dielectric constant of snow. Matzler, C., [1984, p.97-105, ger] **41-628**
- Classification of dry and wet snow avalanches. Kharitonov, G.G., [1986, p.23-32, rus] **41-772**
- Determination of the density and wetness of snow pack. Sihvola, A., et al, [1986, p.717-721, eng] **41-851**
- Determination of the liquid water content of snow by the dye dilution technique. Grenfell, T.C., [1986, p.295-298, eng] **41-1297**
- Snow wetness and sea-ice classification using SAR imagery. Eom, H.J., et al, [1986, p.937-939, eng] **41-2301**
- Dielectric properties of snow in the 3 to 37 GHz range. Hallikainen, M.T., et al, [1986, p.1329-1340, eng] **41-2313**
- Analysis of dielectric behavior of snow in 1.0 to 37.0 GHz frequency range. Abdelrazik, M.A., [1985, 460p., eng] **41-2583**
- Infrared measurement of free-water content and grain size of snow. Hyvärinen, T., et al, [1987, p.342-348, eng] **41-3780**
- Elaboration of two methods to investigate unfrozen water movement in a snow-soil environment. Stein, J., [1987, 310p., eng] **41-3798**
- Density and wetness of a snow pack. Tiuri, M., et al, [1986, p.225-230, eng] **41-3901**
- Liquid water mass fraction of snow measured by alcohol solution. Fisk, D.J., [1986, p.538-541, eng] **41-4311**
- Snow water equivalent**
- Watershed management in the eighties; proceedings. [1985, 317p., eng] **41-448**
- Predicting forest snow water equivalent. Bergman, J.A., [1985, p.154-162, eng] **41-449**
- Simulation of airborne snow water equivalent measurement errors made over a forested watershed. Vogel, R.M., et al, [1985, p.248-255, eng] **41-451**
- Snow management practices for increasing soil water reserves in frozen prairie soils. Gray, D.M., et al, [1985, p.256-263, eng] **41-452**
- Snow management at ski areas: hydrologic effects. Kattelmann, R., [1985, p.264-272, eng] **41-453**
- Winter and summer low flows in Finland. Kuusisto, E., [1986, p.31-38, eng] **41-535**
- Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed, [1986, 84p., rus] **41-543**
- Corrections of snow reserve calculations from measurements. Shentais, I.D., et al, [1986, p.27-36, rus] **41-545**
- Scheme for predicting flood runoff for unstudied rivers of Eastern Siberia. Petenkov, A.V., [1986, p.37-45, rus] **41-599**
- Estimating snow reserves, avalanches, runoff and water balance in the Kyzylchi River basin (based on aerial photography). Gapishko, V.G., [1986, p.19-23, rus] **41-699**
- Hydrologic regime of rivers in inner and central Tien Shan. Muzakeev, M.A., [1984, p.3-9, rus] **41-722**
- Territorial concordance of long-range runoff fluctuations during vegetational periods on rivers of northern Kirgizia. Alamanov, S.K., [1984, p.63-68, rus] **41-726**
- Meltwater streams as the cause of soil erosion. Mkrichian, G.P., [1986, p.108-114, rus] **41-814**
- Calculating river runoff in arid and humid cold regions. Plitkin, G.A., et al, [1986, p.122-130, rus] **41-815**
- Snow cover data, winter 1984-85. [1985, 47p., eng] **41-1037**
- Influence of forestry and forest complexes on river runoff. Mishon, V.M., et al, [1986, p.71-75, rus] **41-1368**
- Regularities governing the formation of river water resources in Siberia. Plitkin, G.A., [1986, p.171-180, rus] **41-1374**
- Pb-210 measurement of snow accumulation at Mizuho Station. Masuda, N., et al, [1986, p.159-165, eng] **41-1472**
- Snow runoff of the Transcaucasian highland. Vladimirov, L.A., et al, [1985, p.545-547, rus] **41-1624**
- Cartographic problems of applied glaciology. Alekseev, V.R., [1986, p.144-146, rus] **41-1657**
- Problems of satellite meteorology and remote sensing. Sitnikova, M.V., ed, [1986, 104p., rus] **41-1684**
- Snow water equivalent over a forest. Carroll, T.R., et al, [1984, p.101-115, eng] **41-1951**
- Independent measurement of snow water equivalent and soil moisture using gamma spectral attenuation. Vadnais, K.G., [1984, p.116-125, eng] **41-1952**
- Snowmelt lysimeter for research applications. Greenan, H.J., et al, [1984, p.209-218, eng] **41-1962**
- Calculation of maximum annual snow reserves in river basins. Galakhov, V.P., et al, [1986, p.100-105, rus] **41-1967**
- Snow water reserves in central Altai. Chubenko, A.G., [1986, p.105-111, rus] **41-1968**
- Variability of hydrological characteristics in western Siberia. Nikitin, S.P., et al, [1986, 204p., rus] **41-1969**
- Technical schemes for melting natural ice for water-supply systems. Vdovin, I.U.I., [1986, p.189-193, rus] **41-2176**
- Snow water equivalent by satellite microwave radiometry. Hallikainen, M.T., et al, [1986, p.855-862, eng] **41-2300**
- Snow distribution patterns in clearings and adjacent forest. Goding, D.L., et al, [1986, p.1931-1940, eng] **41-2466**
- Snow water reserves in taiga zone. Rubtsov, M.V., et al, [1986, p.11-16, rus] **41-2598**
- Remote sensing in the study of elements of moisture supply to geosystems. Grin, A.M., ed, [1986, 113p., rus] **41-2732**
- Modeling meltwater runoff in mountain catchment areas from satellite data. Muzylev, E.L., et al, [1986, p.16-29, rus] **41-2733**
- Calculating runoff formation in catchment areas from remote sensing data. Kulikov, I.U.N., et al, [1986, p.30-36, rus] **41-2734**
- Remote sensing of heat and moisture transfer in geosystems. Kulikov, I.U.N., [1986, p.97-105, rus] **41-2736**
- Hydrological role of the Bilimbaev forests. Mironov, B.A., [1986, p.73-88, rus] **41-2876**
- Ground water regime and runoff in Siberian taiga. Konstantinov, V.D., [1986, p.14-22, rus] **41-3209**
- Changes in chemical composition of meltwater in areas of intensive human activities. Dvornikova, L.L., et al, [1986, p.60-68, rus] **41-3210**
- Alaska snow surveys, 1986 annual data summary. [1986, 17p. + map, eng] **41-3355**
- Modelling the area depletion of a snowcover in a forested catchment. Buttle, J.M., et al, [1987, p.43-60, eng] **41-3405**
- Structural load estimates from geographically sparse data. Tallin, A., et al, [1987, p.628-632, eng] **41-3406**
- Snow cover regime of the northern and central Kazakhstan. Petropavlovskaya, M.S., [1986, p.3-22, rus] **41-3584**
- Snow cover characteristics in agricultural fields. Kaliuzhnyi, I.L., et al, [1986, p.22-37, rus] **41-3585**
- Modeling the process of water yield from snow cover. Pankratova, E.I., et al, [1986, p.37-46, rus] **41-3586**
- Numerical evaluation of the effect of hydrometeorological factors on the formation of water reserves in soil. Zaretski, I.U.A., et al, [1986, p.46-56, rus] **41-3587**
- Ground water formation in southern Tyumen' region. Soloboeva, L.A., [1987, p.131-136, rus] **41-3651**
- Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] **41-3742**
- Aspect and elevation effects on the structure of the seasonal snowcover in Colorado. Dexter, L.L., [1987, 250p., eng] **41-3800**
- Hydrologic studies in mountain forests of the U.S.S.R. Gan, P.A., ed, [1985, 172p., rus] **41-3872**
- Snow accumulation in the Khmar-Daban forests. Onuchin, A.A., [1985, p.109-119, rus] **41-3873**
- Hydrologic applications of space technology. Johnson, A.I., ed, [1986, 488p., eng] **41-3894**
- Snow water equivalent from satellite data and spectrometry. Kuittinen, R., [1986, p.181-189, eng] **41-3896**
- Remote sensing of snowpack properties by microwave radiometry. Chang, A.T.C., [1986, p.201-207, eng] **41-3898**
- Snow cover mapping by microwave radiometry. Hallikainen, M., et al, [1986, p.209-214, eng] **41-3899**
- Remotely sensed snow cover in water supply forecasting. Shafer, B.A., [1986, p.1045-1056, eng] **41-3993**
- Snow cover formation in pine, spruce and black alder forests. Blintsov, I.K., et al, [1987, p.15-18, rus] **41-4171**
- Nimbus-7 SMMR derived global snow cover parameters. Chang, A.T.C., et al, [1987, p.39-44, eng] **41-4432**
- Pattern recognition of air photographs for estimation of snow reserves. Good, W., et al, [1987, p.76-80, eng] **41-4439**

**Snow water equivalent (cont.)**

Interpretation and utilization of areal snow-cover data from satellites. Martinec, J., et al., 1987, p.166-169, eng  
41-4452

Extrapolating snow measurements on the Marmot Creek Experimental Basin. Bernier, P.Y., 1986, p.83-92, eng  
41-4514

**Snow wood friction**

See: Wood snow friction

**Snowdrifts**

Snowdrift models. Irwin, P.A., et al., 1985, p.4-11, eng  
41-334

Proposed code provisions for drifted snow loads. O'Rourke, M., et al., 1986, p.2080-2092, eng  
41-405

Surface features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al., 1986, p.168-170, eng  
41-411

Preservation of protective forest vegetation. Pod'iachev, G.P., 1986, p.15, rus  
41-514

Long period regime of a drifted snow field. Pertsiger, F.I., 1986, p.117-123, rus  
41-782

Seasonal environmental changes on mosses at Showa Station. Kanda, H., 1986, p.17-26, eng  
41-1043

Snow deflector built at the edge of a road cut. Anno, Y., 1986, p.121-129, eng  
41-1283

Snowdrifting: a review of modelling methods. Kind, R.J., 1986, p.217-228, eng  
41-1290

Conversion of a low-speed wind tunnel to a snowdrift wind tunnel. Anno, Y., et al., 1986, p.291-294, eng  
41-1296

Analysis of snow loads due to drifting on multilevel roofs. Speck, R.S., Jr., 1985, p.157-170, eng  
41-1492

Calculating snow-transfer volumes during snowstorms. Diunin, A.K., et al., 1986, p.155-160, rus  
41-1660

Drift snow loads on multilevel roofs. O'Rourke, M.J., et al., 1984, p.14-25, eng  
41-1943

Road design, allowing for climatic impact on traffic conditions. Vasil'ev, A.P., 1986, 248p., rus  
41-2894

One more froude number paradox. Anno, Y., 1987, p.307, eng  
41-3040

Snow distribution patterns in the alpine krummholz zone. Daly, C., 1984, p.157-175, eng  
41-3139

Supply of snow in the Eastern Highlands of Scotland: 1954-5 to 1983-4. Davison, R.W., 1987, p.42-50, eng  
41-3147

Structural basis of snow-retention efficiency of forest strips. Kolomiets, V.A., 1986, p.94-97, rus  
41-3261

Snow cover characteristics in agricultural fields. Kaliuzhnyi, I.L., et al., 1986, p.22-37, rus  
41-3585

Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al., 1986, 328p., rus  
41-3664

Drifting of snow in Northern Kazakhstan. Petropavlovskaya, M.S., et al., 1986, p.67-74, eng  
41-3680

Concentration and flux of wind-blown snow. Mellor, M., et al., 1986, 16p., eng  
41-3928

Parameterization of critical wind speed to cause drifting snow. Kondo, J., 1987, p.67-73, jpn  
41-4321

**Snowfall**

72-year Lake Michigan region snow climatology. Dungey, M.J., et al., 1982, p.45-48, eng  
41-2

Radar observations of snow bands in Finland. Saarikivi, P., 1982, p.461-464, eng  
41-57

Snow crystal habit, and snowfall intensity. Feng, D., et al., 1982, p.485-486, eng  
41-63

Winter cumulus electrification in an axisymmetric cloud model. Takahashi, T., 1982, p.554-557, eng  
41-66

Cirque glacier mass balance, Torngat Mts. Labrador. Rogerson, R.J., 1986, p.41-680, eng  
41-680

Snowfall over Italian Alps. Latini, A., 1986, p.53-63, ita  
41-867

Short-time forecasting of snowfall by lidar. Shimizu, H., et al., 1986, p.2109-2114, eng  
41-1216

Examples of dam construction in Siberia and the Far North. Kolmogorov, R.I., 1973, p.53-62, rus  
41-1276

Icing studies on Mt. Washington: an historical perspective. Rancourt, K.L., 1985, p.197-204, eng  
41-1495

Meteorological and snow cover measurements at Grayling, Michigan. Bates, R.E., et al., 1985, p.212-229, eng  
41-1497

Winter precipitation in central New Brunswick, Canada. Palmer, D.C., 1985, p.230-236, eng  
41-1498

Snow and avalanches in the Swiss Alps, winter 1984-85. 1986, 172p., ger  
41-2290

Snow and avalanche conditions in the Swiss Alps. Gliott, S., et al., 1986, p.45-106, ger  
41-2292

Numerical modeling of optical features of falling snow. Martinez-Sanchez, M., et al., 1983, p.78-85, eng  
41-2314

Scattering corrections to extinction coefficients of falling snow. Winchester, L.W., Jr., et al., 1983, p.86-89, eng  
41-2315

Visible and infrared transmission through snow. Seagraves, M.A., et al., 1983, p.90-93, eng  
41-2316

Obscuration by helicopter-produced snow clouds. Ebersole, J.F., 1983, p.94-99, eng  
41-2317

Numerical simulation of orographic snowfall. Cotton, W.R., et al., 1986, p.1658-1680, eng  
41-2500

Short-term variation of oxygen isotopic composition of falling snow. Fujiyoshi, Y., et al., 1986, p.353-363, eng  
41-2502

Weather extremes. Schmidli, R.J., 1981, 15p., eng  
41-2529

Climate overview of the Canadian inland sea. Maxwell, J.B., 1986, p.79-100, eng  
41-2592

On the width and motion of a rain/snow boundary. Stewart, R.E., et al., 1987, p.343-350, eng  
41-2651

Snow levels and amounts in the mountains of southern California. Minnich, R.A., 1986, p.37-58, eng  
41-2699

Snowfall over Shinjo City, Japan, 1985. Yagi, T., et al., 1986, p.9-24, jpn  
41-3006

Mesoscale features of the Michigan land breeze using PAM II temperature data. Schoenberger, L.M., 1986, p.127-135, eng  
41-3136

Supply of snow in the Eastern Highlands of Scotland: 1954-5 to 1983-4. Davison, R.W., 1987, p.42-50, eng  
41-3147

Vertical wind tunnel for snow process studies. Takahashi, T., et al., 1986, p.182-185, eng  
41-3219

Alaska snow surveys and Federal-state-private cooperative snow surveys. 1987, 3 pieces, eng  
41-3313

Air flow over Lake Michigan and lake-effect snow event. Hjelmfelt, M.R., et al., 1982, p.228-235, eng  
41-3377

Snow-cover electrical resistivity and solid precipitation in Sapporo. Mizuno, Y., 1986, p.11-15, jpn  
41-3502

Drifting of snow in Northern Kazakhstan. Petropavlovskaya, M.S., et al., 1986, p.67-74, eng  
41-3680

Cloud ice and wintertime storms over the mountains of northern Colorado. Rauber, R.M., 1987, p.488-524, eng  
41-3761

Extinction coefficient measurement in falling snow. Koh, G., 1987, 9p., eng  
41-3849

Radar observations of snowfall in 1986 over the Shinjo basin, Japan. Maki, M., et al., 1987, p.1-17, jpn  
41-4002

Method of automatic calibration of the tank model (fifth report)—automatic or semi-automatic procedures to calibrate the multiplication factor of the precipitation in snowy basins. Sugawara, M., et al., 1987, p.87-113, jpn  
41-4003

Precipitation in the cold season, St. Louis, MO. Huff, F.A., et al., 1986, p.1887-1907, eng  
41-4056

Ice sheets and the CO2 problem. Van der Veen, C.J., 1987, p.1-42, eng  
41-4136

On snow particles comprising an aggregate. Fujiyoshi, Y., et al., 1984, p.87-90, eng  
41-4376

Snow production in a convective cloud. Wakahama, G., et al., 1984, p.113-116, eng  
41-4379

Geographic winter storm structure in California. Marwitz, J.D., 1984, p.315-316, eng  
41-4403

Model of the orographic enhancement of snowfall. Choularton, T.W., et al., 1984, p.609-611, eng  
41-4408

Orographic cloud microphysical observations with a microwave radiometer. Sassen, K., 1984, p.801-804, eng  
41-4421

Climatic atlas. Map series 2—Precipitation. 1986, 2p. + 48p. of maps, eng  
41-4521

Doppler radar study of interaction between snowfall and cooling tower plume. Campistron, B., 1987, p.1375-1383, eng  
41-4541

Surface sampling of a snowstorm by a 2D-C probe with and without aspiration. Holroyd, E.W., III, 1986, p.755-758, eng  
41-4544

**Snowflakes**

Extended summaries from Conference on Cloud Physics, 1982. 1982, 587p., eng  
41-1

Simple model of stratified precipitation for scavenging studies. Molenkamp, C.R., 1982, p.63-65, eng  
41-5

Snowflake aggregation near the melting layer in stratiform clouds. Newman, S.B., 1982, p.381-383, eng  
41-40

Riming and snowflake electrification in stratiform clouds. Bauer, C.F., et al., 1982, p.568-569, eng  
41-68

Deep OC isothermal layers within precipitation bands. Stewart, R.E., 1982, p.570-571, eng  
41-69

From snowflakes to ice grains. Microphysical aspects of snow making. Admirat, P., 1985, p.33-44, fre  
41-862

Wind tunnel investigation on the riming of snowflakes. Lew, J.K., et al., 1986, p.2392-2417, eng  
41-2360

Cloud tunnel study on snowflake riming and ice crystal capture by cloud drops. Lew, J.K., 1986, 346p., eng  
41-2643

Scattering and attenuation of millimeter wavelength radiation by snow. O'Brien, S.G., 1986, 138p., eng  
41-2644

Snow stars—messages from the sky. Olovsson, L., 1985, p.50-59, ger  
41-3078

Classification of ambiguous ice particle shadowgraphs by consensus. Dyer, R.M., et al., 1985, p.675-679, eng  
41-3218

Vertical wind tunnel for snow process studies. Takahashi, T., et al., 1986, p.182-185, eng  
41-3219

Simulation for growth of snowflake. Miyazima, S., et al., 1987, p.441-443, eng  
41-3968

Melting of snowflakes in the atmosphere. Matsuo, T., 1984, p.279-291, eng  
41-4400

Effects of topographic variations on the generation of aggregate snowflakes. Cotton, W.R., et al., 1984, p.613-616, eng  
41-4409

Microphysical interpretation of radar polarization measurements. Jameson, A.R., 1984, p.791-792, eng  
41-4419

**Snowmelt**

Effects of clearcutting on rain-snow runoff in western Oregon. Harr, R.D., 1986, p.1095-1100, eng  
41-72

Size distribution of surficial bed material during a snowmelt flood. Andrews, E.D., et al., 1986, p.191-197, eng  
41-211

Radiation budget of a subarctic woodland canopy. Lafleur, P., et al., 1986, p.172-176, eng  
41-212

Expert system for snowmelt runoff modeling and forecasting. Engman, E.T., et al., 1986, p.174-180, eng  
41-249

Streamflow generation from subalpine forests. Troendle, C.A., 1985, p.240-247, eng  
41-450

Scheme for predicting flood runoff for unstudied rivers of Eastern Siberia. Petenkov, A.V., 1986, p.37-45, rus  
41-599

Ground-water fluctuations in hillslopes of coastal Alaska. Sidle, R.C., 1984, p.79-95, eng  
41-627

Swamp stability equations for taiga. Geleta, I.F., 1986, p.49-57, rus  
41-1366

Radio-wave attenuation in melting snow. Jain, Y.M., et al., 1985, p.68-69, eng  
41-1408

Application of NOAA/TIROS satellite data to snowmelt-runoff of Heihe Basin in Qilian Mountain. Zhang, S., et al., 1986, p.119-130, chi  
41-1459

Stream-water chemistry during snowmelt. Hendershot, W.H., et al., 1985, p.58-68, eng  
41-1485

Integrated model of snowmelt quality for boreal forest sites. Roberge, J., et al., 1985, p.69-83, eng  
41-1486

Snow accumulation and snowmelt runoff in a suburban environment. Buttle, J.M., 1985, p.126-138, eng  
41-1490

Snowmelt simulation of short living snowpacks. Bauwens, W., 1985, p.139-155, eng  
41-1491

Effects of snowpack and watershed on snowmelt runoff. McDonnell, J.J., et al., 1985, p.262-266, eng  
41-1502

Snowpack depletion in a forested catchment. Buttle, J.M., et al., 1985, p.267-271, eng  
41-1503

Conditions conducive to glacial mudflow in the Aktru River valley, Altai Mountains, June 24, 1984. Barashkova, N.K., et al., 1986, p.121-124, rus  
41-1651

Energy balance modelling of snowmelt in a suburban environment: a progress report. Buttle, J.M., et al., 1984, p.204-208, eng  
41-1961

Snowmelt lysimeter for research applications. Greenan, H.J., et al., 1984, p.209-218, eng  
41-1962

Design, instrumentation and operation of a snowmelt runoff plot. Goodison, B.E., et al., 1984, p.219-223, eng  
41-1963

Forecasting ice breakup dates for Siberian rivers. Liser, I.A., 1986, p.42-60, rus  
41-1965

Storm precipitation and snowmelt temperature, Clearwater River, Idaho. Schwarz, F.K., 1986, 146p., eng  
41-2215

Large-area deterministic simulation of natural runoff from snowmelt based on Landsat MSS data. Baumgartner, M.F., et al., 1986, p.1013-1017, eng  
41-2303

Acid surge in a well-buffered stream. Jacks, G., et al., 1986, p.282-285, eng  
41-2311

Snow accumulation and melt during rainfall in forest land, Oregon. Berris, S.N., et al., 1987, p.135-142, eng  
41-2465

Snow and water chemistry of lakes in northern Saskatchewan. Shewchuk, S.R., 1983, 62p., eng  
41-2578

Interaction of snowmelt water with terrestrial portion of shield catchment. English, M.C., et al., 1986, p.27-34, eng  
41-2616

Temporal chemical variability in acid sensitive high elevation lakes. Welch, E.B., et al., 1986, p.35-44, eng  
41-2617

Snowmelt acidic shock study in south central Ontario. Goodison, B.E., et al., 1986, p.131-138, eng  
41-2618

Behavior of ionic contaminants in snowpack of Turkey Lakes watershed. Semkin, R.G., et al., 1986, p.215-221, eng  
41-2619

Temporal variation in aluminum speciation and concentration during snowmelt. Hendershot, W.H., et al., 1986, p.231-237, eng  
41-2620

Factors affecting snowmelt streamwater chemistry in the Black Forest (West Germany). Feger, K.H., et al., 1986, p.257-265, eng  
41-2621

Snowmelt in a boreal forest site: an integrated model of meltwater quality (SNOQUALI). Jones, H.G., et al., 1986, p.431-439, eng  
41-2622

Oxygen-18 studies of snowmelt runoff in Precambrian shield watershed. Bottomley, D.J., et al., 1986, p.213-234, eng  
41-2697

Seasonal variation of soil erosion by water in southwestern Quebec. Kirby, P.C., et al., 1987, p.55-63, eng  
41-2726

- Effect of snowmelt on the active sludge process. Särner, E., et al, [1982, p.17-33, swg] 41-2855
- Use of snow-pillow data for melt rate input to the streamflow synthesis and reservoir regulation watershed model. Ferner, S.J., et al, [1987, p.118-126, eng] 41-2980
- Groundwater models for mountain slopes. Okunishi, K., et al, [1987, p.265-285, eng] 41-3043
- Supercritical flume for measuring sediment-laden streamflow. Baker, M.B., Jr., [1986, p.847-851, eng] 41-3305
- Daily flow model of watersheds with snowmelt runoff. Colorado. Norris, J.M., et al, [1985, 32p., eng] 41-3305
- Plot measurements of snowmelt runoff for varying soil conditions. Kane, D.L., et al, [1984, p.123-131, eng] 41-3320
- Water chemistry during snowmelt in a northwestern basin. Barry, P.J., et al, [1984, p.137-155, eng] 41-3321
- Snowmelt solutes in Adirondack region, New York. Rascher, C.M., et al, [1987, p.209-224, eng] 41-3404
- Modelling the areal depletion of a snow cover in a forested catchment. Buttle, J.M., et al, [1987, p.43-60, eng] 41-3405
- Micro-meteorological conditions for snow melt. Kuhn, M., [1987, p.24-26, eng] 41-3592
- Studies of basin heat balance and snowmelt runoff models. Motoyama, H., [1986, p.1-53, eng] 41-3845
- Need for improved snow-cover monitoring techniques. Rango, A., et al, [1986, p.173-179, eng] 41-3895
- NRSA experience in hydrologic applications of space technology. Ramamoorthi, A.S., [1986, p.283-286, eng] 41-3903
- Forecasting snowmelt runoff of Himalayan rivers. Ramamoorthi, A.S., [1986, p.341-347, eng] 41-3904
- Micropollutant behavior in karst water systems during snowmelt. Simmler, N., et al, [1987, p.79-95, eng] 41-3965
- Spatial analysis of snow- and rain-generated highflows in southern Ontario. Irvine, K.N., et al, [1987, p.140-149, eng] 41-4076
- Salt transfer from soil to snow. Kazantsev, V.A., [1984, p.151-155, rus] 41-4091
- Snow drain system—velocity formula for snow-laden water flow. Sato, T., et al, [1983, p.9-16, eng] 41-4133
- Forest harvest, snowmelt and streamflow in the central Sierra Nevada. MacDonald, L.H., [1987, p.273-283, eng] 41-4317
- Snow redistribution: strip cuts at Yuba Pass, California. McGurk, B.J., et al, [1987, p.285-295, eng] 41-4318
- Effects of forests on wetland runoff during spring. Woo, M.-K., et al, [1987, p.297-307, eng] 41-4319
- Forecasting glacial runoff in river basins of Central Asia. Konovalov, V.G., [1986, p.75-78, 187-191, rus] 41-4344
- Role of major floods in glacier basins. Johnson, P.G., et al, [1986, p.82-87, 195-200, rus] 41-4346
- Nomographs for meltwater determination. Ambach, W., et al, [1986, p.181-189, eng] 41-4357
- Nomographs for the determination of meltwater from snow and ice surfaces. Ambach, W., [1986, p.7-15, eng] 41-4358
- Pattern recognition of air photographs for estimation of snow reserves. Good, W., et al, [1987, p.76-80, eng] 41-4439
- Snowmelt on Arctic sea ice. Scharfen, G., et al, [1987, p.200-205, eng] 41-4458
- Satellite snow-cover monitoring and runoff in the Qilian Mts., China. Zeng, Q., et al, [1987, p.225-228, eng] 41-4464
- Spring runoff processes in Åstaldalen, Norway. Englund, J.-O., [1986, p.1-20, eng] 41-4512
- Hydrological model of snowmelt runoff. Cavadas, G., et al, [1986, p.21-30, eng] 41-4513
- Flow forecasts of the Indus River, Pakistan. Makhdoom, M.T.A., et al, [1986, p.171-184, eng] 41-4517
- Preferential elution of snowfall in Scottish highlands. Tranter, M., et al, [1986, p.517-525, eng] 41-4533
- Outline of the studies on the system of snow-melt of the Joetsu-Shinkansen. Nakamata, S., [1985, p.1-6, jpn] 41-4584
- Landslide disaster in Niigata Prefecture, 1985. [1985, p.73-92, jpn] 41-4585
- Remnants of snow avalanche during the snowmelt season. Kobayashi, S., et al, [1985, p.105-109, jpn] 41-4593
- See also: Snow melting
- Snowmobiles**  
See: Snow vehicles
- Snowplows**  
See: Snow removal
- Snowstorms**  
Calculating snow-transfer volumes during snowstorms. Diunin, A.K., et al, [1986, p.155-160, rus] 41-1660
- Role of Soviet academicians during WW2. Kotliakov, V.M., et al, [1986, p.19-25, rus] 41-1819
- Distribution of snowstorms over the Italian Alps and weather types. Latini, A., [1986, p.8-19, ita] 41-2233
- Lake-effect snow storms on Lake Michigan, USA. Braham, R.R., Jr., et al, [1982, p.87-101, eng] 41-3375
- Lowest snow storm of 8-11 December 1977. Braham, R.R., Jr., [1983, p.253-272, eng] 41-3376
- Air flow over Lake Michigan and lake-effect snow event. Hjelmfelt, M.R., et al, [1982, p.228-235, eng] 41-3377
- Mesoscale lake-effect snowstorms near Lake Michigan. Hsu, H.-M., [1987, p.1019-1040, eng] 41-3850
- Snow blizzard in summertime—random notes on observations in Antarctica. Jin, T., [1980, 216p., chi] 41-4125
- Soil aggregates**  
Symposium on Unbound Aggregates in Roads, 1981. [1981, 207p., eng] 41-2923
- Granular base and sub-base materials. Hill, J., [1981, p.33-38, eng] 41-2924
- Grading and frost heave. Hughes, R., [1981, p.51-56, eng] 41-2926
- Research at TRRL on the frost-susceptibility of roadmaking materials. Sherwood, P.T., [1981, p.151-160, eng] 41-2928
- Soil air interface**  
Behavior of frost susceptible soils in industrial regions. Shpolianskaia, N.A., et al, [1985, p.103-105, rus] 41-326
- Short-wave radiation balance and heat flux in alpine soils. Kozhaev, D.A., et al, [1985, p.66-75, rus] 41-1039
- Temperature field and annual heat cycles in soils. Makeev, O.V., et al, [1986, p.27-31, rus] 41-1744
- Geocryological characteristics of mountainous countries in Asia. Trush, N.I., [1986, p.99-108, rus] 41-2089
- Formulas for calculating temperature of snow-covered soils. Lugovoi, P.N., [1986, p.180-192, rus] 41-2099
- Thermal regime of upper soil layers in the Kolyma Basin. Alfimov, A.V., [1985, p.9-29, rus] 41-4119
- Soil analysis**  
Bacterial populations in soils of a subantarctic island. French, D.D., et al, [1986, p.75-82, eng] 41-501
- Soil cement**  
Foundations built of dry cemented earth mixtures. Kosenko, A.A., [1985, p.4-5, rus] 41-506
- Efficient construction of road pavements for the Tiumen' region. Kretov, V.A., et al, [1986, p.10-12, rus] 41-509
- Sub-Arctic ground improvement using the deep mixing method. Horiuchi, S., et al, [1986, p.211-221, eng] 41-1097
- Soil chemistry**  
Human activities impact on the biological activity of mountain soils. Aseeva, I.V., et al, [1986, p.41-45, rus] 41-456
- Pedogenic zonation in the well-drained soils of the Arctic region. Ugolini, F.C., [1986, p.100-120, eng] 41-793
- Frost fissures and their importance for soil genesis. Kulikov, A.I., et al, [1986, p.41-44, eng] 41-993
- Seasonal variations of nitrogen in soils, Alberta. Malhi, S.S., et al, [1986, p.397-409, eng] 41-1085
- Microorganisms in the communities of southern Taymyr tundras. Parinkina, O.M., [1986, p.151-168, rus] 41-1339
- Effect of freeze/thaw on gaseous nitrogen loss from upland soils. Edwards, A.C., et al, [1986, p.86-91, eng] 41-1441
- Influence of frost-heaving on soil chemistry and vegetation. Jonasson, S., [1986, p.185-195, eng] 41-1877
- Retention and release of metals by soils—evaluation of several models. Amacher, M.C., et al, [1986, p.131-154, eng] 41-2138
- Mixed-grass-edge tundra soils of Wrangel Island. Orlovskii, S.D.D., [1986, p.98, rus] 41-2460
- Modeling of solute processes during freezing in peat and overlying water. Li, X.-M., [1986, 119p., eng] 41-2639
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed, [1986, 165p., rus] 41-2912
- Biologic activity of forest soils. Korsunov, V.M., ed, [1985, 122p., rus] 41-4109
- Biologic activities in forest soils of the Angara-Yenisey region. Sorokin, N.D., et al, [1985, p.35-47, rus] 41-4110
- Microflora in forest soils of the Lower Angara depression. Vishniakova, Z.V., et al, [1985, p.88-101, rus] 41-4112
- Peat mineralization in Kola Peninsula and southern Karelia. Pereverzev, V.N., et al, [1986, p.64-72, rus] 41-4116
- Current problems in humus formation. Archegova, I.B., ed, [1986, 172p., rus] 41-4563
- Role of humus-formation processes in the development of soil profiles in Arctic deserts of October Revolution Island in Severnaya Zemlya. Govorenkov, B.F., [1986, p.126-135, rus] 41-4566
- Soil classification**  
Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed, [1985, 160p., rus] 41-4118
- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus] 41-4120
- Soil compaction**  
Compaction of elastic-clayey grounds below building foundations on fills. Aminova, L.I., [1985, p.87-89, rus] 41-318
- Embankments built of water-logged earth with horizontal sand-drains. Vasil'ev, I.U.M., [1985, p.2-3, rus] 41-505
- Loess deposits of the USSR. Sergeev, E.M., ed, [1986, 2 volumes (only Vol.2 pertinent), rus] 41-620
- Soil stabilization by wetting and detonation. Takhirov, I.G., et al, [1986, p.16-19, rus] 41-880
- Design model of a percussion machine for soil compaction. Popov, G.N., et al, [1986, p.103-107, rus] 41-1394
- Modified method for intensive dynamic compaction of weak soils. Marinescu, K., [1986, p.151-168, rus] 41-1851
- Organic soils. Rubinshteln, A.I.A., [1986, 89p., rus] 41-2729
- Consolidation equations of Biot-Florin for three-phase soils. Gorelik, L.V., et al, [1985, p.56-62, rus] 41-3128
- Soil composition**  
Loess deposits of the USSR. Sergeev, E.M., ed, [1986, 2 volumes (only Vol.2 pertinent), rus] 41-620
- Microorganisms in the communities of southern Taymyr tundras. Parinkina, O.M., [1986, p.151-168, rus] 41-1339
- Retention and release of metals by soils—evaluation of several models. Amacher, M.C., et al, [1986, p.131-154, eng] 41-2138
- Structure of the basic spruce forest in southern taiga. Dylis, N.V., et al, [1986, p.6-22, rus] 41-2346
- Vegetation, soils and ground water of central and southern taiga. Stepanov, A.M., et al, [1986, p.64-72, rus] 41-2347
- Soil cover of the Bilimbaev model forest. Firsova, V.P., et al, [1986, p.45-72, rus] 41-2875
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed, [1986, 165p., rus] 41-2912
- Soil nutrient and algal distribution near Showa Station. Akiyama, M., et al, [1986, p.198-201, eng] 41-3636
- Biologic activities in forest soils of the Angara-Yenisey region. Sorokin, N.D., et al, [1985, p.35-47, rus] 41-4110
- Peat mineralization in Kola Peninsula and southern Karelia. Pereverzev, V.N., et al, [1986, p.64-72, rus] 41-4116
- Calcium in the peat soils of northern Europe. Sin'kevich, E.I., [1986, p.72-84, rus] 41-4117
- Current problems in humus formation. Archegova, I.B., ed, [1986, 172p., rus] 41-4563
- Micromorphological characteristics of humus profile in loamy taiga soils. Rusanova, G.V., [1986, p.69-77, rus] 41-4564
- Role of humus-formation processes in the development of soil profiles in Arctic deserts of October Revolution Island in Severnaya Zemlya. Govorenkov, B.F., [1986, p.126-135, rus] 41-4566
- Soil conservation**  
See: Soil erosion
- Soil creep**  
Mechanical properties and behaviour of frozen soils. Youssef, H., [1986, p.299-322, eng] 41-1103
- Flexural behavior of frozen soil. Soo, S., et al, [1986, p.355-361, eng] 41-1161
- Methods of geomorphological field experiments in the USSR. Dedkov, A.P., ed, [1986, 160p., rus] 41-1197
- Slow hydrothermal movements of soil and ground masses on slopes (creep). Dedkov, A.P., et al, [1986, p.77-90, rus] 41-1198
- Laboratory creep tests of frozen gravels. Huang, S.L., et al, [1986, p.101-104, eng] 41-1309
- Engineering creep models for frozen soil behaviour. Berggren, A.-L., [1983, 357p., eng] 41-2014
- Analysis of laterally loaded piles in permafrost. Neukirchner, R.J., [1987, p.15-29, eng] 41-2116
- Creep of soils. Pusch, R., [1979, 74p., eng] 41-2230
- Effect of hydrostatic stress on creep of a frozen sand. Domaschuk, L., et al, [1987, p.119-124, eng] 41-2412
- Resistance of frozen ground to steady cone or pile penetration. Huneault, P., et al, [1987, p.125-132, eng] 41-2413
- In situ creep properties in ice-rich permafrost soil. Savigny, K.W., et al, [1986, p.504-514, eng] 41-2470
- Creep behaviour of undisturbed clay permafrost. Savigny, K.W., et al, [1986, p.515-527, eng] 41-2471
- Canada-France buried chilled pipeline experiment. Williams, P.J., [1986, p.152-159, eng] 41-2521
- Examples of studying landslide processes in Canada. Rechitskii, V.I., [1986, p.96-104, rus] 41-2548
- Analysis of frozen sand beams. Wen, R.K., et al, [1983, p.790-793, eng] 41-2687
- Temperature and time effects on the closure of a gravel room in permafrost. Huang, S.L., [1985, p.53-65, eng] 41-2743
- Numerical modeling of loess structure for forecasting its sustained strength. Anikin, V.S., et al, [1986, p.34-42, rus] 41-3394
- Regime of glaciers in central Tien Shan. Dikikh, A.N., et al, [1986, 136p., rus] 41-3805
- Finite element method for analysis of frozen earth structures. Soo, S., et al, [1987, p.121-129, eng] 41-4489

**Soil dating**

- Relative dating of Neoglacial ridges in North Norway. Innes, J.L., [1984, p.53-63, eng] **41-625**
- Dating slope deposits and estimating rates of rock wall retreat in Northwest Spitsbergen by lichenometry. André, M.F., [1986, p.65-75, eng] **41-1846**
- Dating exposed rock surfaces in the Arctic by lichenometry. Innes, J.L., [1986, p.253-259, eng] **41-1869**

**Soil erosion**

- Environmental protection in Central Yakutia (Collection of scientific papers). Vozin, V.F., ed. [1985, 143p., rus] **41-253**
- Changes in vegetational cover induced by human factors. Nakhbatseva, S.F., et al. [1985, p.3-14, rus] **41-254**
- Slopes and talus of NW Greenland. Malaurie, J., [1985, p.63-79, fre] **41-374**
- Engineering analysis of beach erosion at Homer Spit, Alaska. Smith, O.P., et al. [1985, 29p. + 5 append., eng] **41-528**
- Effect of snow-cover blasting on erosion. Bunza, G., et al. [1984, p.181-190, ger] **41-713**
- Meltwater streams as the cause of soil erosion. Mkrtchian, G.P., [1986, p.108-114, rus] **41-814**
- Restoration of mountain soils, more than a century old activity. Sonnier, J., [1986, p.25-38, fre] **41-871**
- Biomass of Alpine tundra of Putoran Plateau. Deva, N.M., [1986, p.789-794, rus] **41-1003**
- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Brattner, A.P., ed. [1986, 119p., rus] **41-1167**
- Reaction of tundra vegetation to petroleum pollution induced by drilling. Gnat, L.V., [1986, p.82-93, rus] **41-1171**
- Disturbance of tundra vegetation by oil field development. Tentukov, M.P., et al. [1986, p.94-103, rus] **41-1172**
- Studying cryogenic processes at research institutes. Ivanovskii, L.N., et al. [1986, p.136-149, rus] **41-1202**
- Forestry in permafrost regions. Pozdniakov, L.K., [1986, 192p., rus] **41-1343**
- Man-induced erosion in Bol'shezemel'skaya tundra. Zharkova, I.U.G., [1986, p.94-98, rus] **41-1794**
- Heat release during agitated water movement near the ice surface. Gogolev, E.S., et al. [1985, p.14-16, rus] **41-1816**
- Influence of paleo-cryogenic microrelief on erosional processes and soil formation in the central Russian Plain. Velichko, A.A., et al. [1986, p.102-113, rus] **41-1823**
- Thermoerosion of frozen sediment under wave action. Kobayashi, N., et al. [1986, p.140-158, eng] **41-2016**
- Fir trees. Krylov, G.V., et al. [1986, 238p., rus] **41-2259**
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed. [1986, 198p., rus] **41-2373**
- Changes in soil microflora induced by lumbering. Chupin in clear-cut areas. Zagural'skaya, L.M., [1986, p.79-91, rus] **41-2377**
- Use of wheeled vehicles on trees and soil cover during forest thinning in Karelia. D'iakonov, V.V., et al. [1986, p.137-146, rus] **41-2379**
- Soil ecology of pine forests and felled areas in Northern Karelia. Antipina, G.S., [1986, p.182-189, rus] **41-2380**
- Environmental protection of the North: a problem of national importance. Zabuzov, A.A., [1986, p.35-39, rus] **41-2560**
- Seasonal variation of soil erosion by water in southwestern Quebec. Kirby, P.C., et al. [1987, p.55-63, eng] **41-2726**
- Hydrological role of the Bilimbiv forests. Mironov, B.A., [1986, p.73-88, rus] **41-2876**
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed. [1986, 165p., rus] **41-2912**
- Natural revegetation of subpolar mountain areas affected by industry. Martynenko, V.A., [1986, p.163-168, rus] **41-2926**
- Geophysics and man-induced changes of landscape in the Chukotskiy Peninsula. Ignatenko, I.V., et al. [1987, 271p., rus] **41-3247**
- Rational use of natural resources under northern conditions. Collection of works. Agafonov N.T., ed. [1985, 113p., rus] **41-3433**
- Combined use of natural resources in the north European USSR. Zhertovskoi, V.G., [1985, p.26-31, rus] **41-3434**
- Scientific-technological progress and the development of northern natural resources. Chistobayev, A.I., et al. [1985, p.42-51, rus] **41-3435**
- Changes in ecosystems of the North due to economic development. Kriuchkov, V.V., [1985, p.76-83, rus] **41-3438**
- Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., [1986, p.6-63, rus] **41-3541**
- Natural associations of the Arctic and their protection. Korotkevich, E.S., ed. [1986, 120p., rus] **41-3860**
- Human factors in the development of basic Arctic geosystems. Govorukha, L.S., [1986, p.24-30, rus] **41-3861**

- Revegetation of cleared areas in pine forests of southern Priob'ye under conditions of increased human activities. Brikh, I.A., [1985, p.4-11, rus] **41-3980**
- Conference of geologists from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. [1986, 166p., rus] **41-4060**
- Stability of tundra landscapes under transport loads. Zimov, S.A., et al. [1986, p.22-23, rus] **41-4063**
- Regional investigations of thermal erosion. Voskresenskii, K.S., et al. [1986, p.61-63, rus] **41-4064**
- Thermal erosion in the Baykal Amur railroad zone. An, V.V., et al. [1984, p.35-39, rus] **41-4356**
- New information on rock stress streams. Shvetsov, P.F., et al. [1983, p.103-105, rus] **41-4485**
- Soil fluidization**
- See: Thixotropy
- Soil formation**
- One hundred years of genetic pedology. Kovda, V.A., ed. [1986, 276p., rus] **41-521**
- Loess deposits of the USSR. Sergeev, E.M., ed. [1986, 2 volumes (only Vol.2 pertinent), rus] **41-620**
- Pedogenic zonation in the well-drained soils of the Arctic region. Ugolini, F.C., [1986, p.100-120, eng] **41-793**
- Frost fissures and their importance for soil genesis. Kulikov, A.I., et al. [1986, p.41-44, eng] **41-993**
- Peculiarities of weathering and soil formation in forest tundra of the Northern Ob' region. Liverovskaya, I.T., et al. [1986, p.58-63, rus] **41-1164**
- Arctic-alpine soils, southern Norway. Mellor, A., [1986, p.327-336, eng] **41-1180**
- Fine particle translocation in soils of glacial deposits. Locke, W.W., [1986, p.33-43, eng] **41-1186**
- Influence of paleo-cryogenic microrelief on erosional processes and soil formation in the central Russian Plain. Velichko, A.A., et al. [1986, p.102-113, rus] **41-1823**
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] **41-2289**
- Age and evolution of soils in the USSR. Ivanov, I.V., ed. [1986, 230p., rus] **41-2352**
- Modern concept of soil cryogenesis, the evolution of cryogenic soils in the Holocene and problems of land reclamation in the presence of permafrost. Makeev, O.V., [1986, p.37-46, rus] **41-2353**
- Mixed-grass-cryogenic tundra soils of Wrangel Island. Orlovskii, S.-D.D., [1986, p.98, rus] **41-2460**
- Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al. [1986, 112p., rus] **41-2902**
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed. [1986, 165p., rus] **41-2912**
- All-Union Conference on organisms, populations and associations under extreme conditions. Moscow, Nov. 24-26, 1986. Summaries of reports. Sokolov, V.E., ed. [1986, 154p., rus] **41-3539**
- Peculiarities of microbe associations in the Far North and Pamir highlands. Bab'eva, I.P., et al. [1986, p.12-13, rus] **41-3540**
- Gelifluction lobe at Jotunheimen, Norway. Matthews, J.A., et al. [1986, p.345-360, eng] **41-3565**
- Reserved zones of Franz Josef Land. Uspenskii, S.M., et al. [1986, p.7-18, rus] **41-3861**
- Soil formation on coastal plains of the Oktyabr'skaya Revolyutsiya Islands. Govorenko, B.F., [1986, p.4-5, rus] **41-3865**
- Biologic activity of forest soils. Korsunov, V.M., ed. [1985, 122p., rus] **41-4109**
- Biologic activities in forest soils of the Angara-Yenisey region. Sorokin, N.D., et al. [1985, p.35-47, rus] **41-4110**
- Biologic activities in deeply freezing taiga soils. Popova, E.P., [1985, p.47-54, rus] **41-4111**
- Thin forest zone of the Upper Kolyma (area of the Kolyma Power Station construction). Berman, D.I., ed. [1985, 160p., rus] **41-4118**
- Soil cover of the Sibit-Tyellakh river basin. Mazhitova, G.G., [1985, p.30-43, rus] **41-4120**
- Current problems in humus formation. Archegova, I.B., ed. [1986, 172p., rus] **41-4563**
- Micromorphological characteristics of humus profile in loamy taiga soils. Rusanova, G.V., [1986, p.69-77, rus] **41-4564**
- Role of humus-formation processes in the development of soil profiles in Arctic deserts of the October Revolution Island in Severnaya Zemlya. Govorenko, B.F., [1986, p.126-135, rus] **41-4566**
- Soil freezing**
- Formula for calculating foundation stability and tangential frost heave forces. Elgin, B.B., [1985, p.52-53, rus] **41-301**
- Interaction of shallow foundations with underlying seasonally freezing layers. Fursov, V.V., [1985, p.57-59, rus] **41-304**
- Designing low-load foundations of rural buildings in Transbaikalia. Makarov, A.P., et al. [1985, p.59-61, rus] **41-305**
- Frost heave as an indication of ground water regime. Fedorov, V.I., [1985, p.65-70, rus] **41-308**
- Frost heave of ground under variable loading. Orzhekhovskii, I.U.R., et al. [1985, p.80-82, rus] **41-314**

- Development of frost heave deformations in freezing, coarsely clastic ground. Petrova, M.A., et al. [1985, p.89-91, rus] **41-319**
- Deep seasonal freezing of ground in the southern Far East. Bykova, V.I., [1985, p.95-97, rus] **41-322**
- Formulas for calculating frost heave intensity. Ganel's, L.B., et al. [1985, p.106-107, rus] **41-328**
- Studying frost heave in Chita City. Ivin, I.A., [1985, p.110, rus] **41-330**
- Studying tangential forces of frost heave under laboratory conditions. Musorin, A.V., [1985, p.111, rus] **41-331**
- Freezing of liquid-saturated porous media. Weaver, J.A., et al. [1986, p.654-659, eng] **41-396**
- Corps of Engineers Land Treatment Research and Development program. Iskandar, I.K., [1986, p.17-18, eng] **41-406**
- Analysis of the freezing around a chilled pipe in darcy flow. Okada, M., et al. [1978, p.31-36, eng] **41-467**
- Embankments built of water-logged earth with horizontal sand-drains. Migal'sev, I.U.M., [1985, p.2-3, rus] **41-505**
- Problems in soil stabilization. Motylev, I.U.L., [1986, p.10-11, rus] **41-513**
- Heat transfer in a freezing shaft wall. Liandi, F., [1986, 24p., eng] **41-595**
- Impulse method of describing non-equilibrium cryogenic physical-geological processes. Koval'kov, V.P., [1986, p.101-115, rus] **41-603**
- Deflation and nival eolian phenomena near a glacier, SW Spitsbergen. Migals, K., et al. [1984, p.197-206, eng] **41-635**
- Freezing effect on waste contaminants. Iskandar, I.K., [1986, 33p., eng] **41-693**
- Completion of the Voerde freeze shaft. Bittner, F., [1985, p.1423-1428, eng] **41-855**
- Influence of freezing on strata behavior. Stoss, K., et al. [1985, p.1438-1444, eng] **41-858**
- Mathematical model of frost heave in freezing soils. Hromadka, T.V., II, [1980, 178p., eng] **41-899**
- Shear strength loss of a silty sand subjected to frost action. Gifford, G.P., [1984, 296p., eng] **41-901**
- Artificial freezing of ground between permafrost and the active layer. Aleksandrov, I.U.A., [1986, p.7-8, rus] **41-911**
- Seasonal variations of nitrogen in soils, Alberta. Malhi, S.S., et al. [1986, p.397-409, eng] **41-1085**
- Some characteristics of unstaturated clay during freezing. Chen, X., et al. [1986, p.209-216, chj] **41-1417**
- Discussion on critical water content of frost heave. Li, J., [1986, p.223-226, chj] **41-1419**
- Anti-heave effect of middle coarse sand cushion. Zhou, Y., [1986, p.227-232, chj] **41-1420**
- Effect of frost heave on shallow foundations. Xu, B., [1986, p.249-252, chj] **41-1424**
- Discussion on maximum seasonal frost depth of ground. Pang, G., [1986, p.253-254, chj] **41-1425**
- Effect of freeze/thaw on gaseous nitrogen loss from upland soils. Edwards, A.C., et al. [1986, p.86-91, eng] **41-1441**
- Underpinnings with ground freezing. Gudehus, G., et al. [1985, p.203-211, ger] **41-1562**
- Formulas for calculating deformation modulus of frozen ground. Slaschchilin, O.A., [1986, p.8-9, rus] **41-1883**
- Soil freezing and frost heave, N.W.T., Canada. Nixon, J.F., [1986, p.436-438, eng] **41-1929**
- In situ measurements of moisture and salt movement in freezing soils. Gray, D.M., et al. [1986, p.696-704, eng] **41-1930**
- Internal pressures in freezing soils. Wood, J.A., [1985, 261p., eng] **41-2015**
- Frost effects in soils. Van Vliet-Lanoë, B., [1985, p.117-158, eng] **41-2112**
- Frost penetration effect on blasting parameters of seasonally freezing ground. Frash, G.B., et al. [1986, p.55-59, rus] **41-2142**
- Scientific basis for the processes of upbuilding frozen water-ice foams on ground and their practical application. Levinskii, B.V., et al. [1986, p.66-72, rus] **41-2155**
- Determining optimal parameters of thermal protection for dredging grounds. Rashkin, A.V., et al. [1986, p.214-217, rus] **41-2181**
- Cryogenic deformations in reclaimed lands of the Khanka plain. Raiko, V.D., [1986, p.160-162, rus] **41-2251**
- Freezing front location in two-dimensional cold soils. Hromadka, T.V., II, et al. [1987, p.91-95, eng] **41-2407**
- Two-dimensional freezing fronts in algid soil. Yen, C.C., et al. [1987, p.109-112, eng] **41-2410**
- Canada-France buried chilled pipeline experiment. Williams, P.J., [1986, p.152-159, eng] **41-2521**
- Chemical method of treating soils. Migliachenko, V.P., [1986, p.17-18, rus] **41-2556**
- Energy-saving techniques for winter works. Zhuiko, P.A., [1986, p.18-20, rus] **41-2557**
- Energy transfer in soil with nonequilibrium phase transformation. Danielian, I.U.S., et al. [1986, p.156-161, rus] **41-2558**



- Multi-dimensional solutions for melting or freezing around a buried tube. Zhang, G.-P., [1986, 167p., eng.] 41-2588
- Resilient moduli of soil specimens in the frozen and thawed states. Johnson, T.C., et al., [1986, 62p., eng.] 41-2613
- Evaluation of selected frost-susceptibility test methods. Chamberlain, E.J., [1986, 51p., eng.] 41-2614
- Freezing technique for sampling skeletal, structureless forest soils. Froehlich, H.A., et al., [1986, p.1640-1642, eng.] 41-2693
- Winter migration of soil water in the Devitas River basin. Medvedev, M.I.U., et al., [1985, p.90-104, rus.] 41-2731
- Classification and laboratory testing of artificially frozen ground. Sayles, F.H., et al., [1987, p.22-48, eng.] 41-2766
- Drilling complex BTSE-600 for rocks and frozen ground. Bryzhko, S.A., et al., [1986, p.41, rus.] 41-2790
- Development of frost fracture systems in massive frozen ground. Gevorkian, S.G., [1986, p.78-82, rus.] 41-2823
- Methods of classifying frost-heave parameters for compiling a map of rock-heave types. Lebedenko, I.U.P., [1986, p.83-96, rus.] 41-2824
- Ground freezing techniques. Harris, J., [1986, p.11-12, 51, eng.] 41-2893
- Ground freezing '85—a summary. Baker, T.H.W., et al., [1987, p.301-306, eng.] 41-3039
- Determination of the thickness of the frozen zone in soils. Baker, T.H.W., et al., [1982, 8p., eng.] 41-3228
- Dynamics of ice-rock barriers under conditions of freezing of filtering rocks. Chugunov, V.A., et al., [1987, p.981-986, eng.] 41-3242
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus.] 41-3249
- Forecasting ground temperature during adfreezing of piles. Pylaev, E.L., et al., [1987, p.73-75, rus.] 41-3269
- Phase-change heat transfer in porous media. Torrance, K.E., [1986, p.181-188, eng.] 41-3289
- Thermodynamics and mechanics of freezing soil around a pipeline. Patterson, D.E., et al., [1986, 111p., eng.] 41-3364
- Phase composition of moisture in freezing disperse rocks. Danielian, I.U.S., et al., [1986, p.52-59, rus.] 41-3395
- Temperature and time dependence of frozen ground strength. Kononov, A.A., [1986, p.74-84, rus.] 41-3396
- Modeling frost penetration and frost heave. Golli, O.R., [1986, p.53-61, rus.] 41-3446
- Simultaneous calculation of temperature and stresses in freezing-thawing ground. Ukhov, S.B., et al., [1986, p.96-106, rus.] 41-3452
- Feasibility study for stresses in a pipeline buried in freezing soil. [1982, 29p., eng.] 41-3505
- Experimental methods of determining water permeability of frozen soils. Lavrov, S.A., [1986, p.56-62, rus.] 41-3588
- Artificial freezing of cohesive soils for preventing adhesion. Mochalov, V.I., et al., [1986, p.15-17, rus.] 41-3768
- Method of laying pipelines at low temperatures. Karpov, S.V., [1987, p.12-13, rus.] 41-3810
- Heat and mass transfer in soil subjected to artificial freezing. Conoby, M.J., [1987, 209p., eng.] 41-3842
- Settling model for soil freezing. Horiguchi, K., [1986, p.9-82, jpn.] 41-3881
- In situ frost heaving test based on the segregation potential concept. Fukuda, M., et al., [1986, p.99-107, jpn.] 41-3883
- Natural electrical potentials that arise when soils freeze. Yarkin, I.G., [1986, 24p., eng.] 41-3929
- Sub-drainage systems in cryogenic peat soils. Loginov, I.I., et al., [1984, p.51-52, rus.] 41-4089
- Isothermal phase change model for freezing and thawing soils 1: development. Hromadka, T.V., II, [1986, p.113-117, eng.] 41-4134
- Isothermal phase change model for freezing and thawing soils 2: model. Hromadka, T.V., II, et al., [1986, p.118-123, eng.] 41-4135
- Solution of the self-simulating problem of heat and moisture transfer during freezing of disperse soils. Ianitaki, P.A., [1987, p.1338-1344, eng.] 41-4163
- Osmotic model for soil freezing. Horiguchi, K., [1987, p.13-22, eng.] 41-4212
- Frost susceptibility of soil in relation to ice lens formation. Takeda, K., [1987, p.75-86, jpn.] 41-4322
- Cryosphere and the zonality of soil permafrost processes. Mel'nikov, P.I., et al., [1986, p.94-98, rus.] 41-4468
- Procedure for determining the segregation potential of freezing soils. Konrad, J.M., [1987, p.51-58, eng.] 41-4537
- Soil mechanics**
- Structural monitoring concepts for arctic pipelines. Nyman, K.J., et al., [1986, p.47-66, eng.] 41-643
- Snow and avalanche research at the University of Innsbruck. Lackinger, B., [1984, p.155-173, ger.] 41-711
- Mountain collapse and rock sliding from Mount Saint Helens. Kronfellner-Kraus, G., [1985, p.227-232, ger.] 41-719
- Sub-Arctic ground improvement using the deep mixing method. Horiguchi, S., et al., [1986, p.211-221, eng.] 41-1097
- Device for monitoring soil movement in peatlands. Nelson, F.E., [1986, p.275-281, eng.] 41-1258
- Evaluation of selected frost-susceptibility test methods. Chamberlain, E.J., [1986, 51p., eng.] 41-2614
- See also: Frozen ground mechanics
- Soil microbiology**
- Human activities impact on the biological activity of mountain soils. Aseva, I.V., et al., [1986, p.41-45, rus.] 41-456
- Bacterial populations in soils of a subantarctic island. French, D.D., et al., [1986, p.75-82, eng.] 41-501
- Algal groupings in Alpine steppes of northeastern Asia. Pivovarov, Zh.F., [1986, p.521-527, rus.] 41-992
- Biomass of Alpine tundras of Putorana Plateau. Deeva, N.M., [1986, p.789-794, rus.] 41-1003
- Development of soil algae in felled areas of northern taiga. Antipina, G.S., [1986, p.794-798, rus.] 41-1004
- Alpine tundra soil microbiology. Front range, CO. Mancinelli, R.L., [1986, p.269-275, eng.] 41-1176
- Carbon balance of arctic tundra. Peterson, K.M., et al., [1984, p.331-335, eng.] 41-1234
- Phytopathic relationships in alpine tundra, Colorado. Eddleman, L.E., et al., [1984, p.343-359, eng.] 41-1235
- Preliminary results of microbiological investigations at Mirnyy. Ayzov, S.S., et al., [1986, p.133-136, rus.] 41-1270
- Southern tundras of Taymyr. Chernov, I.U.I., ed., [1986, 208p., rus.] 41-1331
- Soil algae in southern tundras of Taymyr. Sdobnikova, N.V., [1986, p.68-79, rus.] 41-1333
- Microorganisms in the communities of southern Taymyr tundras. Parinkina, O.M., [1986, p.151-168, rus.] 41-1339
- Yeasts from Arctic East Siberian tundra. Golubev, V.I., [1986, p.609-612, rus.] 41-1825
- Heterotrophic bacteria from soils of Arctic East Siberian tundra. Velikova, V.L., [1986, p.613-616, rus.] 41-1826
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed., [1986, 198p., rus.] 41-2373
- Silvicultural and ecologic consequences of felling in Karelian forests. Ziabchenko, S.S., ed., [1986, 198p., rus.] 41-2373
- Changes in soil microflora induced by lumbering equipment in clear-cut areas. Zagural'skaya, L.M., [1986, p.79-91, rus.] 41-2377
- Decomposition of wood litter on felled areas of the North. Kozlovskaya, L.S., et al., [1986, p.92-107, rus.] 41-2378
- Soil algae of pine forests and felled areas in Northern Karelia. Antipina, G.S., [1986, p.182-189, rus.] 41-2380
- Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed., [1986, 165p., rus.] 41-2912
- Construction properties of gley clayey ground. Popov, A.F., [1986, p.16-22, rus.] 41-3393
- Rational use and preservation of ecosystems in the North. Piavchenko, N.I., [1985, p.68-75, rus.] 41-3437
- All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports. Sokolov, V.E., ed., [1986, 154p., rus.] 41-3539
- Peculiarities of microbe associations in the Far North and Pamir highlands. Bab'eva, I.P., et al., [1986, p.12-13, rus.] 41-3540
- Microbe associations of Arctic soils. Parinkina, O.M., [1986, p.101-103, rus.] 41-3542
- Biologic activity of forest soils. Korsunov, V.M., ed., [1985, 122p., rus.] 41-4109
- Biologic activities in forest soils of the Angara-Yenisey region. Sorokin, N.D., et al., [1985, p.35-47, rus.] 41-4110
- Biologic activities in deeply freezing taiga soils. Popova, E.P., [1985, p.47-54, rus.] 41-4111
- Microflora in forest soils of the Lower Angara depression. Vishniakova, Z.V., et al., [1985, p.88-101, rus.] 41-4112
- Soil-melioration studies in Karelia. Nesterenko, I.M., ed., [1986, 144p., rus.] 41-4115
- Calcium in the peat soils of northern Europe. Sin'kevich, E.I., [1986, p.72-84, rus.] 41-4117
- Microorganisms found in Alpine soils, snow cover and streams. Dobrovolskaya, N.G., et al., [1985, p.77-81, rus.] 41-4562
- Soil moisture**
- See: Soil water
- Soil physics**
- Strong fluctuation theory for moist granular media. Stogryn, A., [1985, p.78-83, eng.] 41-2322
- In-situ thermal conductivity measurements. Atkins, R.T., [1983, 38p., eng.] 41-4070
- See also: Frozen ground physics
- Soil pollution**
- Geochemical exploration in economically developing parts of taiga. Zagoskin, V.A., et al., [1986, p.145-148, rus.] 41-200
- Environmental protection in Central Yakutia (Collection of scientific papers). Vozin, V.F., ed., [1985, 143p., rus.] 41-253
- Oil spill impacts on meadow soils. Oderusova, T.G., [1985, p.27-31, rus.] 41-256
- Accumulation of airborne trace pollutants by arctic plants and soil. Thomas, W., [1986, p.47-57, eng.] 41-344
- Fate of petroleum pollutants in Arctic ecosystems. Atlas, R.M., [1986, p.59-67, eng.] 41-345
- Development and use of a new melting agent. Washüttel, J., [1985, p.49-57, ger.] 41-390
- Disturbance of tundra vegetation by oil field development. Tentiukov, M.P., et al., [1986, p.94-103, rus.] 41-1172
- Preliminary results of microbiological investigations at Mirnyy. Ayzov, S.S., et al., [1986, p.133-136, rus.] 41-1270
- Possible routes of pollution transport to the Arctic. Krasovskaya, T.M., [1986, p.93-96, rus.] 41-1645
- Studies on the residual effects of de-icing salts. Kutter, M., et al., [1986, p.5-12, ger.] 41-2325
- Environmental protection of the North: a problem of national importance. Zabuzov, A.A., [1986, p.35-39, rus.] 41-2560
- Impact of ejecta from coal-fueled power plants on paludal north-taiga pine forests. Alekseev, V.A., et al., [1986, p.664-672, rus.] 41-2562
- Environmental protection in Siberia. Vorob'ev, V.V., [1985, p.52-60, rus.] 41-3436
- Changes in ecosystems of the North due to economic development. Kriuchkov, V.V., [1985, p.76-83, rus.] 41-3438
- Microbiology of human pollution at Showa Station. Toyoda, S., et al., [1985, p.541-546, jpn.] 41-3568
- Antarctic terrestrial ecosystem. Walton, D.W.H., [1987, p.83-93, eng.] 41-3740
- Influence of industrial wastes on vegetation of northern forest ecosystems. Egorova, V.N., et al., [1987, p.143-147, rus.] 41-4570
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernen'kova, T.V., [1987, p.147-157, rus.] 41-4571
- Soil pressure**
- Internal pressures in freezing soils. Wood, J.A., [1985, 261p., eng.] 41-2015
- Soil profiles**
- Chemical composition of tundra soils in western Taymyr. Chugunova, M.V., [1986, p.169-173, rus.] 41-1340
- Primary successions of Arctic tundras on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.99-105, rus.] 41-1820
- Development of taiga forests. Savina, L.N., [1986, 189p., rus.] 41-2258
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus.] 41-2289
- Primary succession in Arctic tundra on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.148-156, eng.] 41-2341
- Age and evolution of soils in the USSR. Ivanov, I.V., ed., [1986, 230p., rus.] 41-2352
- Modern concept of soil cryogenesis, the evolution of cryogenic soils in Holocene and problems of land reclamation in the presence of permafrost. Makeev, O.V., [1986, p.37-46, rus.] 41-2353
- Buried soils of northeastern Yakutia (the Khallerchinskaya tundra). Fominykh, L.A., et al., [1986, p.109-120, rus.] 41-2354
- Mixed-grass-edge tundra soils of Wrangel Island. Orlovskii, S.-D.D., [1986, p.98, rus.] 41-2460
- Investigations of Pleistocene glacial drift in the central Yukon. Smith, C.A.S., et al., [1986, p.29-37, eng.] 41-2704
- Soil cover of the Bilibambay model forest. Firsova, V.P., et al., [1986, p.45-72, rus.] 41-2875
- Pale yellow soils of the central Siberian Plateau. Sokolov, I.A., [1986, p.25-38, rus.] 41-3083
- Soil formation on coastal plains of the Oktyabr'skaya Revolyutsiya Islands. Govorenkov, B.F., [1986, p.41-51, rus.] 41-3865
- Humus profiles in the paludified loamy podsoils of taiga. Vtiurin, G.M., [1986, p.78-88, rus.] 41-4565
- Role of humus-formation processes in the development of soil profiles in Arctic deserts of October Revolution Island in Severnaya Zemlya. Govorenkov, B.F., [1986, p.126-135, rus.] 41-4566
- Soil settling**
- See: Settlement (structural)
- Soil stabilization**
- Problems in soil stabilization. Moylev, I.U.L., [1986, p.10-11, rus.] 41-513
- Stabilization of fine-grained soil for road and airfield construction. Danyluk, L.S., [1986, 37p., eng.] 41-540
- Reaction of loess soils with hydrofluosilicic acid and carbamide resins. Zgadzai, L.K., et al., [1986, p.53-57, rus.] 41-601
- Assessment of freeze-thaw damage in cement stabilised soils. Kettle, R.J., [1986, p.16-31, eng.] 41-641
- Construction of foundations of low-rise buildings and structures on sagging ground. Koroteev, D.V., [1986, 155p. (pertinent p. 80-135), rus.] 41-784
- Soil stabilization by wetting and detonation. Takhirov, I.G., et al., [1986, p.16-19, rus.] 41-880

**Soil stabilization (cont.)**

- Strength and filtration properties of water-saturated peats in a detonation zone. Smirnov, A.G., et al, 1986, p.115-118, rusj **41-906**
- Engineering and geological investigations of saline soils. Bakonov, B.B., et al, 1986, 245p., rusj **41-996**
- Influence of cryogenic phenomena on the performance of monolithic, concrete, filterless reinforcement of slopes of cohesive-earth dams. Kanarskii, V.F., et al, 1986, p.41-43, rusj **41-1403**
- Chemical stabilization of noncohesive soils. Mitrakov, V.I., et al, 1986, p.25-27, rusj **41-1528**
- Stability of hydraulically built-up construction sites under dynamic loads. Efremov, N.A., et al, 1986, p.29-31, rusj **41-1529**
- Method of selective underground mining and stabilization of rock cavities. Hoberstorfer, G., et al, 1983, 18 col., engj **41-1773**
- Biologic recultivation of tailings in the Far North. Pereverzev, V.N., et al, 1986, 104p., rusj **41-2752**
- Guide to the construction of bases and foundations (summary) to construction norms and regulations SNiP 3.02.01-83. 1986, 567p., rusj **41-2968**
- Guide to soil stabilization by injection. 1986, 129p., rusj **41-3608**
- Grass-shrub vegetation developing on Arctic sand dunes. Sergienko, V.G., 1987, p.208-215, rusj **41-3610**
- Soil strength**
- Seasonal changes in the humidity and strength of thawed soils. Vostretsov, O.K., 1985, p.84-85, rusj **41-316**
- Stability of gravity platform foundation. Hoddinott, T., et al, 1986, p.127-135, engj **41-358**
- Laboratory soil testing for design of arctic offshore structures. Saada, A.S., et al, 1986, p.137-149, engj **41-359**
- Assessment of freeze-thaw damage in cement stabilised soils. Kettle, R.J., 1986, p.16-31, engj **41-641**
- Sub-Arctic ground improvement using the deep mixing method. Horiuchi, S., et al, 1986, p.211-221, engj **41-1097**
- Controlling factors of ice-created sea floor features. Clark, J.I., et al, 1986, p.565-582, engj **41-1118**
- Ice-resistant offshore structures. Gershunov, E.M., 1986, p.605-623, engj **41-1120**
- Method for comparing and optimizing arctic offshore structures. Korppoo, S., 1986, p.624-632, engj **41-1121**
- Interaction between submerged embankment and multi-year ice floes. Larsen, O.D., 1986, p.678-692, engj **41-1124**
- Arctic drilling/production unit anchored by tendons. Stewart, W.P., 1986, p.26-28, engj **41-1223**
- Concrete island under ice loading. Templeton, J.S., III, et al, 1987, p.33-40, engj **41-2399**
- Torsional resistance of a single pile in a layered soil. Hache, R.A.G., et al, 1986, p.1004-1019, engj **41-3172**
- Construction properties of gley clayey ground. Popov, A.F., 1986, p.16-22, rusj **41-3393**
- Numerical modeling of loess structure for forecasting its sustained strength. Anikin, V.S., et al, 1986, p.34-42, rusj **41-3394**
- Structural criteria for pipelines in Arctic and earthquake regions. Price, P.S.J., et al, 1987, p.89-97, engj **41-4629**
- Soil structure**
- Dynamic properties of frozen granular soils. Li, J.C.-C., 1979, 335p., engj **41-897**
- Ice lensing in layered soils. Penner, E., 1986, p.334-340, engj **41-1159**
- Frost heaving classifications of the coarse grained soil. Wang, Z., 1986, p.195-200, chij **41-1415**
- Periglacial processes, Banks Island, Canada. French, H.M., 1986, p.167-174, engj **41-1875**
- Geophysics and man-induced changes of landscapes in the Chukotskiy Peninsula. Ignatenko, I.V., et al, 1987, 271p., rusj **41-3247**
- Construction properties of gley clayey ground. Popov, A.F., 1986, p.16-22, rusj **41-3393**
- Soil surveys**
- Improving the efficiency of geochemical exploration methods in taiga (8th Session of the Siberian branch of SGPM) summaries of reports. 1986, 240p., rusj **41-197**
- Strategy of geochemical exploration in the taiga zone. Tauson, L.V., 1986, p.10-14, rusj **41-198**
- Calculating heat balance constituents of soil surface. Konstantinov, A.R., et al, 1986, p.62-66, engj **41-3679**
- Soil temperature**
- Thermal properties of sandur and tundra regions due to weather conditions. Joly, D., 1985, p.95-101, frej **41-376**
- Seasonal variations in temperatures of subalpine soils. Razumov, V.V., 1985, p.90-102, rusj **41-848**
- Carbon dioxide gas exchange components of tundra plants at various temperatures. Lediakina, N.A., et al, 1986, p.1067-1073, rusj **41-1455**

- Progress in pedology. Contributions of Soviet pedologists to the 13th International Congress of Pedologists. Hamburg, 1986. Kovda, V.A., ed, 1986, 270p., rusj **41-1743**
- Makeev, O.V., et al, 1986, p.27-31, rusj **41-1744**
- Winter soil moisture regime. Ryden, B.E., 1986, p.175-184, engj **41-1876**
- Formulas for calculating temperature of snow-covered soils. Lugovoi, P.N., 1986, p.180-192, rusj **41-2099**
- Spatial variability of soil temperature. Davidoff, B., et al, 1986, p.1122-1127, engj **41-2473**
- Perennially frozen rocks of the Qinghai-Xizang Plateau (Tibet) and conditions of their formation. Tong, B., et al, 1986, p.66-78, rusj **41-2541**
- Chemical method of treating soils. Miglachenko, V.P., 1986, p.17-13, rusj **41-2556**
- Ground surface temperature above underground heat-pipelines. Tikhomirov, A.L., et al, 1986, p.94-97, rusj **41-2757**
- Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al, 1986, 112p., rusj **41-2902**
- More precise definition of computed permafrost temperatures in beds of buildings and structures. Fedorovich, D.I., et al, 1986, p.188-192, engj **41-2945**
- Thermal properties of soils. Farouki, O.T., 1986, 136p., engj **41-2973**
- Ground water regime and runoff in Siberian taiga. Konstantinov, V.D., 1986, p.14-22, rusj **41-3209**
- Hydrothermal regime of taiga and tundra soils of northeastern Europe. Kononenko, A.V., 1986, 145p., + inserts, rusj **41-3246**
- Geophysics and man-induced changes of landscapes in the Chukotskiy Peninsula. Ignatenko, I.V., et al, 1987, 271p., rusj **41-3247**
- Temperature and time dependence of frozen ground strength. Konovalov, A.A., 1986, p.74-84, rusj **41-3396**
- Cryolithozone and ground water. Nekrasov, I.A., 1987, p.116-118, rusj **41-3398**
- Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains. Severskii, I.V., et al, 1986, p.29-38, rusj **41-3484**
- Calculating heat balance constituents of soil surface. Konstantinov, A.R., et al, 1986, p.62-66, engj **41-3679**
- Snow cover distribution in a system of young poplar strips. Zarudnyi, I.A.K., 1987, p.45-46, rusj **41-3745**
- Thermal regime of upper soil layers in the Kolyma Basin. Alifimov, A.V., 1985, p.9-29, rusj **41-4119**
- Heat balance of the non-chernozem zone of Russia. Nesmelova, E.I., et al, 1987, p.54-60, rusj **41-4168**
- See also: Frozen ground temperature
- Soil thawing**
- See: Ground thawing
- Soil trafficability**
- Role of Soviet academicians during WW2. Kotliakov, V.M., et al, 1986, p.19-25, rusj **41-1819**
- Air cushion vehicle operations in the Arctic. Fancy, S.G., 1982, 27p., engj **41-4068**
- Soil veins**
- See: Patterned ground
- Soil water**
- Cryolithozone of Alpine deserts in Central Asia. Gorbanov, A.P., 1986, p.100-104, rusj **41-114**
- Heaving pressure of ground freezing in a limited space. Kim, V.Kh., 1985, p.73-74, rusj **41-310**
- Snow management practices for increasing soil water reserves in frozen prairie soils. Gray, D.M., et al, 1985, p.256-263, engj **41-452**
- Discussion on critical water content of fros' heave. Chen, J., 1986, p.223-226, chij **41-1419**
- Stream-water chemistry during snowmelt. Hendershot, W.H., et al, 1985, p.58-68, engj **41-1485**
- Winter soil moisture regime. Ryden, B.E., 1986, p.175-184, engj **41-1876**
- Soil freezing and frost heave, N.W.T., Canada. Nixon, J.F., 1986, p.436-438, engj **41-1929**
- Independent measurement of snow water equivalent and soil moisture using gamma spectral attenuation. Vadnais, K.G., 1984, p.116-125, engj **41-1952**
- Effects of snow and ice on wetland water chemistry. Campbell, J., et al, 1984, p.143-147, engj **41-1955**
- Evaluating the solutions of nonlinear problems on freezing and thawing of moist ground. Danielian, I.U.S., et al, 1986, p.350-353, rusj **41-2306**
- Strong fluctuation theory for moist granular media. Stogryn, A., 1985, p.78-83, engj **41-2322**
- Effect of hydrostatic stress on creep of a frozen sand. Domaschuk, L., et al, 1987, p.119-124, engj **41-2412**
- Remote sensing of heat and moisture transfer in geosystems. Kulikov, I.U.N., 1986, p.97-105, rusj **41-2736**
- Radiation and heat regime of some high-mountain biogeocenoses. Kucherenko, V.E., 1986, p.66-86, rusj **41-2880**
- Eolian dunes in Victoria Land. Miotke, F.-D., 1985, p.79-125, gerj **41-3252**
- Remote sensing and hydrologic models. Peck, E.L., et al, 1982, 179p., engj **41-3256**

- Plot measurements of snowmelt runoff for varying soil conditions. Kane, D.L., et al, 1984, p.123-135, engj **41-3320**
- Salt transfer from soil to snow. Kazantsev, V.A., 1984, p.151-155, rusj **41-4091**
- See also: Ground water; Unfrozen water content
- Soil water migration**
- Increasing the service life of hydraulic structures. Gavrilenko, V.I., et al, 1985, p.61-63, rusj **41-3306**
- Frost heave as an indication of ground water regime. Fedorov, V.I., 1985, p.65-70, rusj **41-308**
- Results of field observations of seasonal ground freezing dynamics. Sazonov, G.M., 1985, Soil freezing, rusj **41-309**
- Seasonal changes in the humidity and strength of thawed soils. Vostretsov, O.K., 1985, p.84-85, rusj **41-316**
- Dynamics and hydrophysical properties of forest litter in the Krasnoyarsk forest steppes. Stakanov, V.D., et al, 1986, p.172-176, rusj **41-816**
- Frost fissures and their importance for soil genesis. Kulikov, A.I., et al, 1986, p.41-44, engj **41-993**
- Model of heat and soil-water flow coupled by soil-water phase change. Hromadka, T.V., II, 1987, 124p., engj **41-1568**
- In situ* measurements of moisture and salt movement in freezing soils. Gray, D.M., et al, 1986, p.696-704, engj **41-1930**
- Energy transfer in soil with nonequilibrium phase transformation. Danielian, I.U.S., et al, 1986, p.156-161, rusj **41-2558**
- Winter migration of soil water in the Devitsa River basin. Medvedev, M.I.U., et al, 1985, p.90-104, rusj **41-2731**
- Water saturation and transfer in geosystems from remote sensing data. Mandych, A.F., et al, 1986, p.45-55, rusj **41-2735**
- Methods of classifying frost-heave parameters for compiling a map of rock-heave types. Lebedenko, I.U.P., 1986, p.83-96, rusj **41-2824**
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilibaev experimental forest taken as an example). Zubareva, R.S., ed, 1986, 158p., rusj **41-2873**
- Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al, 1986, 112p., rusj **41-2902**
- Freezing of water and melting of ice in disperse rocks. Ershov, E.D., 1986, p.55-67, engj **41-3016**
- Transport of water in frozen soil 6. Effects of temperature. Nakano, Y., et al, 1987, p.44-50, engj **41-3019**
- Consolidation equations of Biot-Florin for three-phase soils. Gorelik, L.V., et al, 1985, p.56-62, rusj **41-3128**
- Biochemical anomalies in permafrost zone and their interpretation. Lobanova, A.B., 1987, p.170-172, engj **41-3163**
- Dynamics of ice-rock barriers under conditions of filtering rocks. Chugunov, V.A., et al, 1987, p.981-986, engj **41-3242**
- Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., 1986, 333p., rusj **41-3249**
- Phase composition of moisture in freezing disperse rocks. Danielian, I.U.S., et al, 1986, p.52-59, rusj **41-3395**
- Cryolithozone and ground water. Nekrasov, I.A., 1987, p.116-118, rusj **41-3398**
- Building hydraulic structures on perennially frozen rocks. Novikov, N.F., 1986, p.62-66, rusj **41-3447**
- Investigation of moisture movements and stresses in frozen soils. Williams, P.J., et al, 1982, 46p., engj **41-3499**
- Investigation of moisture movements and stresses in frozen soils. Williams, P.J., et al, 1982, 134p., + append., engj **41-3500**
- On the origin of aggradational ice in permafrost. Burn, C.R., 1986, 222p., + append., engj **41-3507**
- Ground water formation in southern Tyumen' region. Solobova, A.A., 1987, p.131-136, rusj **41-3651**
- Water content, solutes and temperature in a partially frozen soil. Mizoguchi, M., et al, 1986, p.11-17, jpnj **41-3750**
- Calculating frost penetration into rocks of a cylindrical cavity. Dugartayrenov, A.V., et al, 1986, p.21-24, rusj **41-3770**
- Elaboration of two methods to investigate unfrozen water movement in a snow-soil environment. Stein, J., 1987, 310p., engj **41-3798**
- Solution model for soil freezing. Horiguchi, K., 1986, p.69-82, jpnj **41-3881**
- Frost-heave analysis based upon a heat and water flow model. Fukuda, M., et al, 1986, p.83-97, jpnj **41-3882**
- In situ* frost heaving test based on the segregation potential concept. Fukuda, M., et al, 1986, p.99-107, jpnj **41-3883**
- Protective forest strips in cold dry steppes. Lamin, L.A., 1985, p.79-87, rusj **41-3981**
- Thermally induced heave beneath pipelines in frozen ground. Nixon, J.F., 1987, p.260-266, engj **41-4055**
- Soil climate in southeastern West Siberia. Az'muka, T.I., et al, 1984, p.26-31, rusj **41-4088**
- Solution of the self-similar problem of heat and moisture transfer during freezing of disperse soils. IAnitskii, P.A., 1987, p.1338-1344, engj **41-4163**

- Osmotic model for soil freezing. Horiguchi, K., [1987, p.13-22, eng] 41-4212
- Soils**
- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] 41-2289
- Modeling of processes in landscape-geochemical systems. Sysuev, V.V., [1986, 301p., rus] 41-3512
- Problems of origin and geography of soils. Liverovskii, I.U.A., [1987, 248p., rus] 41-4555
- See also specific types of soils
- Solar activity**
- Nitrate flux on the Ross Ice Shelf and its relation to solar cosmic rays. Zeller, E.J., et al, [1986, p.1264-1267, eng] 41-2019
- Solar radiation**
- Ice ablation in relation to climatic factors in W. Greenland. Braithwaite, R.J., et al, [1984, p.155-168, eng] 41-632
- Formulas for calculating air temperature and global radiation over glaciers. Kononov, V.G., et al, [1986, p.71-80, rus] 41-777
- Calculating sums of global radiation on mountain slopes. Samukashvili, R.D., [1985, p.78-89, rus] 41-847
- Short-wave radiation balance and heat flux in alpine soils. Kozhaev, D.A., et al, [1985, p.66-75, rus] 41-1039
- Thermal performance of the building envelope. Tabunshchikov, I.U.A., et al, [1986, 400p., rus] 41-1749
- Bulletin of scientific-technical information. Power engineering of Southern Yakutia. Petrov, N.A., ed, [1984, 32p., rus] 41-1829
- Solar heating systems for low-rise buildings. Il'in, M.M., [1984, p.7-9, rus] 41-1830
- Thermal melioration of ground by late-fall loosening. Stafeev, P.F., [1986, p.4-5, rus] 41-1886
- Automatic anti-freeze system for solar water heaters. Bonnet, A., [1983, 10 col., eng] 41-1980
- Nitrate flux on the Ross Ice Shelf and its relation to solar cosmic rays. Zeller, E.J., et al, [1986, p.1264-1267, eng] 41-2019
- Formulas for calculating temperature of snow-covered soils. Lugovoi, P.N., [1986, p.180-192, rus] 41-2099
- Radiation and heat regime of some high-mountain biogeocenoses. Kucherenko, V.E., [1986, p.66-86, rus] 41-2880
- Micro-meteorological conditions for snow melt. Kuhn, M., [1987, p.24-26, eng] 41-3592
- Twenty years of short-wave radiation observations. Marshunova, M.S., [1986, p.8-16, eng] 41-3949
- Enhanced solar radiation along coastal Hudson Bay. Rouse, W.R., [1987, p.670-674, eng] 41-4209
- Role of shortwave radiation in the summer decay of a sea ice cover. Maykut, G.A., et al, [1987, p.7032-7044, eng] 41-4258
- Solid liquid interfaces**
- See: Liquid solid interfaces
- Solid phases**
- Amorphous ice made by "melting" ice I. Whalley, E., [1986, p.314-318, eng] 41-891
- Transformation prior to melting in ammonia, organic compounds and ice. Pruzan, P., et al, [1986, p.949-961, eng] 41-1864
- Moving boundary problem. Benard, C., et al, [1986, p.1669-1681, eng] 41-2065
- Bounds for the freezing time and removed energy during solidification. Charach, C., et al, [1987, p.233-240, eng] 41-2982
- Buoyancy and surface tension driven natural convection with solidification. Munakata, T., et al, [1986, p.1733-1738, eng] 41-3292
- Laminar flow heat transfer in a tube with internal solidification. Toda, S., et al, [1986, p.1745-1750, eng] 41-3293
- Melting process within spherical enclosures. Roy, S.K., et al, [1987, p.460-462, eng] 41-3757
- Solidified gases**
- Zones and excitons of cryocrystals. Sobolev, V.V., [1986, 206p., rus] 41-997
- Solids**
- Thermodynamics of a solid body subjected to external loads. Beghi, M., et al, [1987, p.26-32, eng] 41-2066
- Solidification**
- Formula for calculating horizontal forces produced by thawing ground. Bondarenko, G.I., [1985, p.53-55, rus] 41-302
- Development of cryogenic processes in the central Transbaikalia. Shesternev, D.M., et al, [1985, p.74-76, rus] 41-311
- Studying soils and ground in the central BAM area. Vasilenko, N.G., et al, [1986, p.104-118, rus] 41-425
- Methods of geomorphological field experiments in the USSR. Dedkov, A.P., ed, [1986, 160p., rus] 41-1197
- Slow hydrothermal movements of soil and ground masses on slopes (creep). Dedkov, A.P., et al, [1986, p.77-90, rus] 41-1198
- Methods of studying solifluction in Franz Josef Land. Zhigarev, L.A., et al, [1986, p.120-129, rus] 41-1200
- Studying cryogenic processes at research institutes. Ivanovskii, L.N., et al, [1986, p.136-149, rus] 41-1202
- All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures). 3rd, Novosibirsk, 1984. Proceedings. [1985, 126p., rus] 41-1362
- Ground water level rise in Siberia and the Far North and East. Gospodinov, D.G., [1985, p.27-33, rus] 41-1363
- Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al, [1986, p.37-49, rus] 41-1537
- Methods of predicting destructive cryogenic phenomena associated with the development of an area from the example of NW Siberia. Mel'nikov, P.I., et al, [1986, p.44-49, eng] 41-1791
- Environmental protection of the North: a problem of national importance. Zabuzov, A.A., [1986, p.35-39, rus] 41-2560
- Peculiarities of mapping rock glaciers. Gorbunov, A.P., et al, [1986, p.5-22, rus] 41-3482
- Permafrost distribution and slope processes in central Tien Shan. Tarakanov, A.G., [1986, p.98-109, rus] 41-3807
- Dangerous glacial slope processes in mountain ecosystems of Siberia. Laptev, M.N., et al, [1986, p.63-65, rus] 41-4065
- Thermal erosion in the Baykal Amur railroad zone. An, V.V., et al, [1984, p.35-39, rus] 41-4356
- New information on rock streams. Shvetsov, P.F., et al, [1983, p.103-105, rus] 41-4485
- Signs of "semiarid" pediplanation on Mars. Polosukhin, V.P., [1987, p.79-85, rus] 41-4497
- Development of landslide processes in the lower Ob' River valley. Okhalin, S.N., et al, [1986, p.106-116, rus] 41-4574
- Solutions**
- Polyvinyl chloride well casings for ground water monitoring. Parker, L.V., et al, [1986, p.92-98, eng] 41-1345
- Freezing temperatures of aqueous solutions. Suri, S.K., et al, [1986, p.705-715, eng] 41-1552
- Thermodynamics of electrolyte solutions. Beyer, R.P., et al, [1986, p.749-764, eng] 41-1553
- Heat of solution of methane in water from 0 to 50 C. Naghibi, H., et al, [1986, p.4621-4623, eng] 41-2064
- Frozen solution proton ENDOR spectra. Attanasio, D., [1986, p.4952-4957, eng] 41-2106
- Mossbauer spectroscopy of frozen aqueous solution of Fe(ClO<sub>4</sub>)<sub>2</sub>. Domes, H., et al, [1986, p.7294-7300, eng] 41-2108
- Effect of natural convection on ice crystal growth rates in salt solutions. Huang, J.S., et al, [1985, p.747-752, eng] 41-2333
- Heat and mass transfer during crystal growth from water solutions. Braľovskaia, V.A., et al, [1986, p.54-55, rus] 41-2382
- X-ray diffraction and ice nucleation studies of AgI-AgCl solid solutions. Palanisamy, M., et al, [1986, p.1005-1009, eng] 41-2467
- Effect of polysaccharide stabilizers on the rate of growth of ice. Muhr, A.H., et al, [1986, p.683-710, eng] 41-2491
- Elastic PVA hydrogel prepared by freezing-and-melting. Yokoyama, F., et al, [1986, p.595-601, eng] 41-2574
- Effects of freezing on nitrite stability in aqueous solutions. Muneta, P., et al, [1987, p.22-23, eng] 41-2808
- Pulse radiolysis study of electrons in frozen alkaline solutions. Czerwik, Z., et al, [1986, p.275-283, eng] 41-2811
- Heats of solution of ethane and propane in water from 0 to 50 C. Naghibi, H., et al, [1987, p.245-248, eng] 41-3311
- Melting of ice layer by effect of temperature and aqua-solvent. Sugawara, M., et al, [1987, p.227-232, eng] 41-3963
- Ice growth in supercooled solutions of antifreeze glycoprotein. Harrison, K., et al, [1987, p.241-243, eng] 41-4228
- Metastable water at subzero temperatures. Franks, F., [1986, p.243-249, eng] 41-4359
- Freezing of water and water-salt solutions around aluminum spheres. Chellaiah, X., et al, [1987, p.437-446, eng] 41-4542
- Sonar**
- See: Acoustic measurement
- Sonic velocity**
- See: Sound transmission
- Sound**
- See: Acoustics
- Sound transmission**
- Sound propagation above snow-covered and ground surfaces. McDaniel, O.H., et al, [1986, 59p., eng] 41-242
- Non-Gaussian noise as the background interference in telecommunication. Nuttall, A.H., et al, [1986, 161p., eng] 41-2072
- Analysis of acoustical features of laboratory grown sea ice. Stanton, T.K., et al, [1986, p.1486-1494, eng] 41-3068
- Measurement of the speed of sound in ice. Smith, A.C., et al, [1986, p.1713-1715, eng] 41-3071
- Sound waves**
- Law observed in the generation of sound in ice samples subjected to loading. Mitisev, P.V., et al, [1986, p.168-169, rus] 41-3240
- Sounding**
- Impulse radar sounding of level first-year sea ice from an icebreaker. Martinson, C.R., [1985, 9p., eng] 41-461
- Soviet glaciological studies on the eastern ice field in 1984-1985. [1986, p.10-16, rus] 41-1633
- Balloon observation of aerosols in the antarctic troposphere and stratosphere. Ito, T., et al, [1986, p.214-222, eng] 41-1752
- Seven expeditions to Spitsbergen. Koriakin, V.S., [1986, 176p., rus] 41-4124
- See also: Echo sounding; Radio echo soundings
- South Georgia**
- Beach changes from retreating glacier ice in South Georgia. Gordon, J.E., et al, [1986, p.15-24, eng] 41-1844
- South Orkney Islands**
- Thermobaric and ice conditions, South Orkney region. Petrov, L.S., et al, [1986, p.59-65, eng] 41-3950
- Spaceborne photography**
- Mathematical modeling of hydrometeorological processes. Denisov, I.U.M., ed, [1986, 84p., rus] 41-543
- Macroscale model of snow cover formation in mountainous regions. Shetia, I.D., [1986, p.15-27, rus] 41-544
- All-Union seminar on remote sensing methods and means of measuring oceanographic parameters, 5th, Moscow, Sep. 20-23, 1983. Proceedings. [1986, 236p., rus] 41-702
- Remote sensing of sea ice by complex radar-radiometric methods. Gavrilenko, A.S., et al, [1986, p.130-134, rus] 41-706
- Interpreting satellite scanning images of medium resolution for studying ice conditions in the Baltic Sea. Drabkin, V.V., [1986, p.223-227, rus] 41-707
- Identification of regional features of West Siberian swamps on space photographs. Gorozhankina, S.M., [1986, p.29-37, rus] 41-817
- Ice drift tracing of water circulation in the Arctic. Kuz'mina, N.P., et al, [1984, p.20-32, eng] 41-818
- Errors in geological interpretation of space images. Kuzin, I.L., [1984, p.436-442, eng] 41-820
- Geological interpretation of space images of covered areas. Astakhov, V.I., [1984, p.443-451, eng] 41-821
- Antarctica: measuring glacier velocity from satellite images. Lucchitta, B.K., et al, [1986, p.1105-1108, eng] 41-962
- Sea ice concentration from AVHRR imagery. Yamanouchi, T., et al, [1986, p.89-102, eng] 41-979
- Photo-control tie of the SMP-32 to the MSU-S data and some reflection spectra characteristics of natural objects. Dosov, V.N., et al, [1985, p.57-66, rus] 41-1040
- Weddell-Scotia sea ice margin, Oct. 1984. Carsey, F.D., et al, [1986, p.3920-3924, eng] 41-1361
- Possibility of distinguishing landscape types and evaluating their hydrologic properties from space photographs. Markus, I.A., [1986, p.153-159, rus] 41-1373
- Application of space imagery to geocryologic mapping. Nekrasov, I.A., et al, [1985, p.187-195, eng] 41-1445
- Infrared spectral radiance measurements of snow and clouds from space. Velsmann, U.K., et al, [1921, p.219-225, eng] 41-1446
- Using satellite data for calculating ocean-atmosphere heat transfer in the Newfoundland energy-active oceanic zone in winter. Rzeplinski, D.G., et al, [1986, p.32-41, rus] 41-1540
- Establishing periods of stable snow cover duration in mountains. Tsarev, B.K., et al, [1986, p.73-78, rus] 41-1641
- Some results and prospects for studying mass balance of glaciers (according to materials of a Hamburg seminar in 1983). Kotliakov, V.M., et al, [1986, p.179-193, rus] 41-1666
- Problems of satellite meteorology and remote sensing. Sitnikova, M.V., ed, [1986, 104p., rus] 41-1684
- Interpolation of satellite data on seasonal snow line elevations within the mountain region limits. Tsarev, B.K., [1986, p.59-65, rus] 41-1686
- Study of ice covers by radiophysical means from aerospace platforms. Efimov, V.B., et al, [1985, p.394-399, eng] 41-1892
- Permafrost distribution and temperature from aerial surveys and spaceborne photography. Gavrilov, A.V., [1986, p.58-76, rus] 41-2086
- Methods of forest interpretation on texture-selective images. Kravtsova, V.I., [1986, p.55-66, rus] 41-2304
- Decrease in glacier cover on the islands of the Eurasian Arctic during the 20th Century. Koriakin, V.S., [1986, p.157-165, eng] 41-2342
- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, [1986, 160p., rus] 41-2714
- Digital processing of radar images obtained from the satellite "Kosmos-1500". Asmus, V.V., et al, [1986, p.37-57, rus] 41-2716
- Methods of compiling general radar maps of polar regions. Bondina, T.V., et al, [1986, p.58-63, rus] 41-2717

**Spaceborne photography (cont.)**

- Enhancing Landsat data acquired under very low illumination. Miller, J.M., et al, 1986, p.801-807, eng; 41-2741
- Satellite remote sensing technique for study of alpine glaciers. Della Ventura, A., et al, 1987, p.203-215, eng; 41-2763
- Engineering-geological evaluation of railroad construction areas. Marakhtanov, V.P., 1986, p.12-13, rus; 41-2791
- Radiofrequency thermal emission of melting ice cover as an indicator of the ice state—case of Lake Sevan. Kondrat'ev, K.I.A., et al, 1986, p.21-23, eng; 41-2941
- Using satellite survey data for studying mass transfer in glacial systems. Nosenko, G.A., 1986, p.26-31, rus; 41-3211
- Evaluating the state of gas pipelines from space photographs. Arefeva, E.M., et al, 1986, p.27-29, rus; 41-3212
- Landsat multispectral images of Antarctica applied to mapping and glaciology. Lucchitta, B.K., et al, 1985, p.256-259, eng; 41-3327
- Satellite methods of studying naleds and ground waters of eastern Pamir. Topchiev, A.G., 1986, p.48-58, rus; 41-3391
- Geologic indication of ground ice in Tien Shan and Pamir. Ermolin, E.D., 1986, p.22-29, rus; 41-3483
- Remote sounding and interpretation of cryo-hydro-geochemical anomalies. Makarov, V.N., et al, 1986, p.133-144, rus; 41-3494
- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed, 1986, 192p., rus; 41-3513
- Spaceborne photography methods of monitoring geosystems in the new economic development areas of Siberia. Platinin, L.A., 1986, p.9-14, rus; 41-3514
- Using satellites in mapping West Siberian forests. Gorozhankina, S.M., et al, 1986, p.34-43, rus; 41-3515
- Satellite methods of studying avalanche formation. Laptev, M.N., et al, 1986, p.43-49, rus; 41-3516
- Use of satellite information in studying distribution of discontinuous permafrost. Dorofeev, I.V., et al, 1986, p.55-59, rus; 41-3518
- Ground water naleds, central BAM. Defkin, B.N., et al, 1986, p.86-94, rus; 41-3520
- Satellite methods of studying naleds. Abakumenko, A.E., 1986, p.94-99, rus; 41-3521
- Problems in automation of geophysical investigations. Collection of works. Deviatil'nyi, A.S., ed, 1985, 162p., rus; 41-3543
- Classification of sea ice according to structural characteristics. Aleksanina, M.G., 1985, p.52-58, rus; 41-3544
- Surface topography of large ice masses from Landsat imagery. Dowdeswell, J.A., et al, 1987, p.16-23, eng; 41-3591
- Sea ice concentration assessed from aerospace imagery. Aleksandrov, V.I.U., et al, 1987, p.181-189, eng; 41-3626
- Sedimentary deposits in the northern lowland plains, Mars. Lucchitta, B.K., et al, 1986, p.E166-E174, eng; 41-3749
- Using GOES thermal infrared data to map citrus freeze zones. Shih, S.F., et al, 1987, p.737-743, eng; 41-3777
- Remote sensing techniques used in solving geobotanical problems. Sharapov, V.N., ed, 1986, 191p., rus; 41-3970
- Remote sensing techniques of studying taiga after forest fires. Furiaev, V.V., 1986, p.147-159, rus; 41-3971
- Using spaceborne photography data in studying forests and swamps. Gorozhankina, S.M., 1986, p.169-189, rus; 41-3973
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, 1984, 193p., rus; 41-4086
- Hydromeliorative regionalization of West Siberia from space photographs. Gorozhankina, S.M., 1984, p.16-25, rus; 41-4087
- Ground and satellite measurement of ice sheets, Queen Maud Land. Fujii, Y., et al, 1987, p.72-75, eng; 41-4438
- Snow and ice features shown by thematic mapper and MSS images. Orheim, O., et al, 1987, p.109-118, eng; 41-4445
- Mapping Amery Ice Shelf. Partington, K.C., et al, 1987, p.183-188, eng; 41-4455
- Effect of divergence on ice redistribution in the Arctic Ocean, revealed by space imagery analysis. Nazirov, M., 1987, p.30-36, rus; 41-4618
- See also: LANDSAT**
- Spacecraft**
- Systems and means of oceanic radio-communication. Panin, I.U.I., ed, 1984, 144p., rus; 41-557
- Satellites for collecting information from automatic hydrometeorological stations. Denisov, S.I., et al, 1984, p.85-88, rus; 41-559
- Satellites for industrial development in Arctic regions. Taagholt, J., 1986, p.71-82, eng; 41-1091
- Evaluating the information content of satellite data on snow line altitude for forecasting runoff of mountain rivers in the Fergana Basin. Tsarev, B.K., 1986, p.40-50, rus; 41-1685
- Lightweight heater tape for shuttle propellant tank. Spencer, D.J., et al, 1986, 51p., eng; 41-2070
- Scientific problems and basic results of the "Kosmos-1500" experiment. Afanas'ev, I.U.A., et al, 1986, p.4-20, rus; 41-2715
- Thermal environment around the Space Shuttle with hot-gas jets for ice suppression. Singhal, A.K., et al, 1986, p.547-553, eng; 41-2738
- Ball bearing lubricants operating in various environments. McMurtrey, E.L., 1984, 18p., eng; 41-3041
- Specific volume**
- See: Density (mass/volume)**
- Specifications**
- See: Building codes; Design criteria; Standards**
- Spectra**
- Techniques to measure the spectral reflectance of ice. Bolsenga, S.J., et al, 1984, p.384-391, eng; 41-1356
- Ion irradiations of water, sulfur dioxide and methane ices. Lanzerotti, L.J., et al, 1985, p.317-335, eng; 41-1710
- Ice in cometary grains. Campins, H., 1985, p.443-452, eng; 41-1718
- Raman scattering spectra at the water-ice phase transition. Glushkov, S.M., et al, 1986, p.836-839, rus; 41-3686
- Spectroscopy**
- Abnormally enriched elemental concentrations in urban snow. Drake, J.J., et al, 1985, p.255-261, eng; 41-1501
- Evaluation of SPOT HRV simulation data for Corps of Engineers applications. McKim, H.L., et al, 1985, p.61-71, eng; 41-1917
- Frozen sodium proton ENDOR spectra. Attanasio, D., 1986, p.4952-4957, eng; 41-2106
- Mössbauer spectroscopy of frozen aqueous solution of Fe(CIO<sub>4</sub>)<sub>2</sub>. Domes, H., et al, 1986, p.7294-7300, eng; 41-2108
- Snow water equivalent from satellite data and spectrometry. Kuittinen, R., 1986, p.181-189, eng; 41-3896
- See also: Ice spectroscopy; Infrared spectroscopy**
- Spillways**
- Concretes for high dams. Sudakov, V.B., ed, 1985, 101p., rus; 41-413
- Waterproofing and corrosion prevention in hydraulic structures. Shchavalev, N.F., ed, 1985, 100p., rus; 41-431
- Polymer cavitation-resistant coatings of the Bratsk Dam spillway. Dymant, A.N., et al, 1985, p.58-63, rus; 41-433
- Ice movement velocity at localized water-level drops above spillway outlets. Raspopin, G.A., et al, 1986, p.71-74, rus; 41-1395
- Allowing for stream and ice dynamics when calculating ice breakup on concentrated overfalls. Fomichev, B.S., 1986, p.83-87, rus; 41-2755
- Passing of ice and construction wastes at the Kureyskaya site. Zait'sman, O.M., et al, 1986, p.23-27, rus; 41-2865
- Using dry, low-cement concretes in permafrost areas. Zait'sman, O.M., et al, 1986, p.31-35, rus; 41-2867
- Spurious permafrost**
- Deep seasonal freezing of soils and ground in the Central Asian and Kazakhstan mountains. Severskiĭ, I.V., et al, 1986, p.29-38, rus; 41-3484
- Spray**
- See: Sea spray**
- Spray freezing**
- Helicopter Icing Spray System (HISS) evaluation and improvements. Belte, D., et al, 1986, 148p., eng; 41-454
- Spray-ice islands evaluated for Arctic-drilling structures. Juvkam-Wold, H.C., 1986, p.57-66, eng; 41-646
- Springs (water)**
- Drilling and completion of water bearing layers in permafrost. Kvashnin, G.P., 1987, 247p. (Pertinent p.128-138), rus; 41-3666
- See: Hot springs**
- Stability**
- Iceberg stability—an error analysis. Bass, D.W., et al, 1986, p.49-55, eng; 41-1303
- Towards the understanding of steady tilt phenomenon in semi-submersibles. Atlar, M., 1987, p.139-149, eng; 41-2415
- Seafloor stability study, inner Scotian Shelf. Judge, J.T., et al, 1987, 80p., eng; 41-4531
- See also: Slope stability; Snow cover stability; Soil stabilization**
- Standards**
- Proposed standard specification for cold weather concreting (ACI 306.1). Carino, N.J., et al, 1986, p.1043-1047, eng; 41-2473
- State standards index of the USSR, 1985. 1985, 5 vols., rus; 41-2481
- State standards index of the USSR, 1986. 1986, 4 vols., rus; 41-2482
- Inadequate norms concerning the increase of winter earthwork costs. Myznikov, I.U.N., 1987, p.41-44, rus; 41-2799
- See also: Building codes; Design criteria; Work time standards**
- Starters**
- See: Engine starters**
- Static loads**
- Frost heave of ground under variable loading. Orzhekhovskii, I.U.R., et al, 1985, p.80-82, rus; 41-314
- Electrical impulse method of determining the strength of frozen ground and ice. Kytin, I.U.A., 1982, p.108-113, rus; 41-1275
- Response of floating ice beams and plates with partial flooding. Kerr, A.D., 1986, p.75-86, eng; 41-1584
- Effect of oscillatory loads on the bearing capacity of floating ice covers. Kerr, A.D., et al, 1987, p.219-224, eng; 41-3032
- Stations**
- Soviet research station disappears. Fresco-Mayoux, A., 1986, p.61-63, fre; 41-2018
- See also: Drift stations; Weather stations**
- Statistical analysis**
- Fit of statistical distributions to ice nuclei concentration data. Pérez, P.J., et al, 1984, p.135-140, spa; 41-2749
- On the application of lattice statistics to bubble trapping in ice. Enting, I.G., 1987, p.100-113, eng; 41-3195
- Probabilities of ice, wind and temperature loads on electrical transmission lines. Gartsman, L.B., 1987, 200p., rus; 41-3245
- Calculating heat balance constituents of soil surface. Konstantinov, A.R., et al, 1986, p.62-66, eng; 41-3679
- Glacier mass balance, SE Alaska and NW British Columbia. Pelto, M.S., 1987, p.189-194, eng; 41-4456
- Steam curing**
- See: Concrete curing**
- Steel structures**
- Steels for heavy-duty marine and offshore use. 1986, p.34-36, eng; 41-90
- Pile-foundation supports of power lines in the southern Far East. Tiurin, I.M., 1985, p.63-64, rus; 41-307
- Steel plates for arctic offshore structures. Okano, S., et al, 1986, p.119-126, eng; 41-357
- Waterproofing and corrosion prevention in hydraulic structures. Shchavalev, N.F., ed, 1985, 100p., rus; 41-431
- Bond and slip of steel bars in frozen sand. Alwahhab, R.M., 1983, 361p., eng; 41-898
- Substations 110/6-10 kv built in the Urengoy gas field area. Gaft, S.I.A., et al, 1986, p.6-7, rus; 41-910
- Elastoplastic deformation of steel at low temperatures. Zhigalkin, V.M., et al, 1986, p.129-141, rus; 41-1017
- Corrosion resistance steels for low-temperature construction. Itoh, K., et al, 1986, p.869-896, eng; 41-1136
- Floating dock. Gusev, V., 1986, p.18-19, rus; 41-1398
- Frame of the main building of the Neryungri power plant. Pavliukov, S.I., 1986, p.13-17, rus; 41-1401
- High strength steel plates for Arctic offshore structures. Tagawa, H., et al, 1985, p.49-59, eng; 41-1570
- Construction of the mobile drilling platform (Super CIDS) for Arctic use. Maruyama, K., et al, 1985, p.89-102, eng; 41-1571
- Increasing frost resistance of steel bridges. Bol'shakov, K.P., 1986, p.12-14, rus; 41-1888
- Ten years of ice-induced vibration isolation in lighthouses. Mänttinen, M., 1987, p.261-266, eng; 41-2430
- Construction of steel reservoirs under northern conditions. Popovskii, B.V., 1985, p.28-34, rus; 41-2848
- Durability of metal structures of industrial buildings in Yakutia. Filippov, V.V., et al, 1985, p.37-47, rus; 41-2849
- Reliability of welded steel joints of main pipelines. Chaburkin, V.F., 1985, p.54-61, rus; 41-2850
- Conditions of cold resistance and durability of structural elements in the North. Lyglaev, A.V., 1985, p.83-90, rus; 41-2851
- Electric-arc welding under northern conditions. Larionov, V.P., 1986, 256p., rus; 41-3511
- Duplex stainless steel linepipe for Arctic use. Taira, T., et al, 1987, p.159-165, eng; 41-4635
- Steels**
- Corrosion of offshore reinforced concrete structures. Jensen, F.O., 1986, p.405-413, eng; 41-360
- Steel plates for arctic offshore structures. Itoh, K., et al, 1986, p.807-832, eng; 41-1134
- New materials for sub-arctic and arctic offshore structures. Itoh, K., et al, 1986, p.833-968, eng; 41-1135
- Material selection and fabrication recommendations for arctic offshore structures. Lohne, P.W., 1986, p.897-910, eng; 41-1137
- Cast steels for sub-arctic offshore applications. Martikainen, H., et al, 1986, p.911-932, eng; 41-1138
- Arctic offshore steels. Räsänen, E., 1986, p.952-969, eng; 41-1140
- Structural hollow sections and PE-coated steel pipes in the Arctic. Soininen, R., 1986, p.970-987, eng; 41-1141



- Steel plates for offshore structures used in icy seas. Hattori, K., et al, [1984, p.35-52, eng] 41-1192
- Weld properties for ultra-heavy steel plates for offshore structures. Homma, H., et al, [1984, p.53-59, eng] 41-1193
- "RAEX POLAR" brand of steel for icebreaker construction. [1985, p.9, rus] 41-1513
- Welded groove-and-tongue profiles for high strength bulwarks. Kuznetsov, A.I., et al, [1986, p.26-28, rus] 41-1534
- Steel plates for low temperature uses. Yamada, M., et al, [1984, p.28-38, eng] 41-1569
- Behavior at cryogenic temperatures of steel for concrete reinforcement. Elices, M., et al, [1986, p.405-411, eng] 41-2071
- Calculating the cold resistance of shipbuilding steel. Sokolov, A.O., [1987, p.42-43, rus] 41-2787
- Construction of steel reservoirs under northern conditions. Popovskii, B.V., [1985, p.28-34, rus] 41-2848
- Large heat input welds for arctic offshore structures. Watanabe, S., et al, [1986, p.B-284, eng] 41-3939
- Development of heavy thick HT80 steel plates for racks of jack-up rigs. Okano, S., et al, [1987, p.B-14, eng] 41-3940
- High tensile strength steel plates for arctic offshore structures. Furusawa, J., et al, [1987, p.B-15, eng] 41-3941
- Effect of microstructure on HAZ toughness of steel for offshore structures. Endo, S., et al, [1987, p.B-16, eng] 41-3942
- Stefan problem**
- Enthalpy methods used in the solution of Stefan problems. Voller, V.R., et al, [1985, p.245-275, eng] 41-658
- Two-dimensional heat conduction phase change. Albert, M.R., et al, [1983, p.85-110, eng] 41-659
- Melting process in which solid-liquid interface remains free during melting. Shmarev, S.I., [1986, p.95-99, rus] 41-1627
- Inverse Stefan problem in casting multicomponent alloys. Rutner, I.A.F., [1986, p.1479-1483, eng] 41-1852
- Dynamics of temperature fields during accretion of floating ice. Bondarev, E.A., et al, [1986, p.39-42, rus] 41-2152
- Scientific basis for the processes of upbuilding frozen water-ice foams on ground and their practical application. Levinakii, B.V., et al, [1986, p.66-72, rus] 41-2155
- Self-similar solution of a problem of freezing of finely dispersed soils with allowance for moisture migration in thawed and frozen zones. Ianitskii, P.A., [1986, p.264-270, eng] 41-2208
- Univariate single-phase Stefan problem of movement in liquid phase. Kulagina, N.A., [1985, p.36-49, rus] 41-2350
- Self-simulating multivariate Stefan problem. Shmarev, S.I., [1986, p.126-146, rus] 41-2351
- Integral formulations and bounds for two phase Stefan problems. Dewynne, J.N., et al, [1986, p.201-228, eng] 41-2366
- Numerical methods for predicting and controlling thermal regime of rocks in permafrost areas. Izakson, V.I.U., et al, [1986, 94p., rus] 41-2745
- Methods of classifying frost-heave parameters for compiling a map of rock-heave types. Lebedenko, I.U.P., [1986, p.83-96, rus] 41-2824
- Non-steady-state heat exchange of linear underground constructions with a thawing (freezing) soil. Gokhman, M.R., [1987, p.781-785, eng] 41-3241
- Crystallization of freezing mixture in porous media. Entov, V.M., et al, [1986, p.447-449, eng] 41-3628
- Calculating frost penetration into rocks of a cylindrical cavity. Dugartayrenov, A.V., et al, [1986, p.21-24, rus] 41-3770
- Cooling of a salt solution. Entov, V.M., et al, [1987, p.1344-1347, eng] 41-4164
- Stability of a plane crystallization front moving at constant velocity. Badratinova, L.G., [1983, p.388-394, eng] 41-4613
- Steppes**
- Algal groupings in Alpine steppes of northeastern Asia. Pivovarova, Zh.F., [1986, p.521-527, rus] 41-992
- Winter migration of soil water in the Devitsa River basin. Medvedev, M.I.U., et al, [1985, p.90-104, rus] 41-2731
- Snow cover distribution in a system of young poplar strips. Zarudnyi, I.A.K., [1987, p.45-46, rus] 41-3745
- Protective forest strips in cold dry steppes. Lamin, L.A., [1985, p.79-87, rus] 41-3981
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, [1984, 193p., rus] 41-4086
- Soil climate in southeastern West Siberia. Az'muka, T.I., et al, [1984, p.26-31, rus] 41-4088
- Storage**
- See: Cold storage; Oil storage, Underground storage; Water storage
- Storage tanks**
- Avoiding low temperature brittle failures of oil storage tanks. Fraylick, J.R., [1986, p.125-130, eng] 41-78
- Combined Production and Storage System (COMPASS) used in ice-infested waters. Pass, H., [1986, p.633-659, eng] 41-1122
- See also: Tanks (containers)
- Storms**
- Case studies of ice distribution in hurricanes. Black, R.A., et al, [1982, p.335-337, eng] 41-28
- Hail formation in an Oklahoma multicell storm. Ziegler, C.L., et al, [1982, p.427-430, eng] 41-49
- Influence of storm flow structure on hail growth. Nelson, S.P., [1982, p.431-433, eng] 41-50
- Storm precipitation and snowmelt temperature, Clearwater River, Idaho. Schwarz, F.K., [1986, 146p., eng] 41-2215
- See also: Ice storms; Snowstorms
- Strain measuring instruments**
- Verification tests for a stiff inclusion stress sensor. Cox, G.F.N., et al, [1987, p.81-88, eng] 41-3301
- Strain tests**
- Strain rate measurements on a firm pit, Austria. Eisner, H., et al, [1984, p.169-176, eng] 41-633
- Classification and laboratory testing of artificially frozen ground. Sayles, F.H., et al, [1987, p.22-48, eng] 41-2766
- Ice stream-ice shelf interaction in West Antarctica. Bindshadler, R.A., et al, [1987, p.161-180, eng] 41-3279
- Discussion of "Repeated load triaxial testing of frozen and thawed soils". Yousef, H., [1986, p.221-225, eng] 41-3782
- Strains**
- Strain anomalies during surges of Variegated Glacier, Alaska. Raymond, C.F., et al, [1986, p.178-191, eng] 41-677
- Ice cover deformations at Adams Island, winter 1982-1983. Sayed, M., et al, [1986, p.346-354, eng] 41-1160
- Exact solution for melting of frozen soil with thaw consolidation. Lunardini, V.J., [1987, p.97-102, eng] 41-2408
- Explicit technique for calculating first year ice loads on structures. Walden, J.T., et al, [1987, p.267-272, eng] 41-2431
- Constitutive theory for high rate multiaxial deformation of snow. Hansen, A.C., [1986, 148p., eng] 41-2586
- Compressive strength of saline ice. Blair, S.C., [1986, p.351-364, eng] 41-2665
- Simultaneous calculation of temperature and stresses in freezing-thawing ground. Ukhov, S.B., et al, [1986, p.96-106, rus] 41-3452
- Isotropic points on glaciers. Nye, J.F., [1986, p.363-365, eng] 41-4289
- See also: Shear strain
- Stratigraphy**
- Quaternary glaciations of Central Siberia. Velichko, A.A., ed, [1986, 121p., rus] 41-1906
- Chronostratigraphy of syngenetic permafrost deposits by oxygen-isotope analysis. Arkhangellov, A.A., et al, [1986, p.413-417, rus] 41-2307
- See also: Firm stratification; Snow stratigraphy
- Stratosphere**
- Stratosphere aerosol layer in winter. Iwasaka, Y., [1986, p.143-151, eng] 41-1019
- Balloon observation of aerosols in the antarctic troposphere and stratosphere. Ito, T., et al, [1986, p.214-222, eng] 41-1752
- Formation of polar stratospheric clouds. Steele, H.M., et al, [1983, p.2055-2067, eng] 41-2004
- Characteristics of Arctic polar stratospheric clouds. Kent, G.S., et al, [1986, p.2149-2161, eng] 41-2550
- Stratospheric aerosol descent in winter and effects on water vapor budget. Iwasaka, Y., [1986, p.13-18, eng] 41-3654
- Stream flow**
- Effects of clearcutting on rain-snow runoff in western Oregon. Harr, R.D., [1986, p.1095-1100, eng] 41-72
- Surface features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al, [1986, p.168-170, eng] 41-411
- Streamflow generation from subalpine forests. Troendle, C.A., [1985, p.240-247, eng] 41-450
- Some practical aspects of graphical ice reduction. Hyvarinen, V., [1986, p.25-29, eng] 41-534
- Winter and summer low flows in Finland. Kuusisto, E., [1986, p.31-38, eng] 41-535
- River ice conditions in Finland. Maunula, M., [1986, p.45-54, eng] 41-537
- Runoff in relation to hydroelectric stations, W. Greenland. Thomsen, H.H., et al, [1985, p.100-103, eng] 41-574
- Low-temperature effects on flow in sand-bed streams. Lau, Y.L., [1987, p.111-115, eng] 41-2067
- Regionalization of winter low-flow characteristics of Tennessee streams. Bingham, R.H., [1986, 88p., + 2 maps, eng] 41-2137
- Use of snow-pillow data for melt rate input to the streamflow synthesis and reservoir regulation watershed model. Ferner, S.J., et al, [1987, p.118-126, eng] 41-2980
- Satellite data input to Windy Gap computerized streamflow forecasting model. Eckhardt, J.R., et al, [1986, p.349-354, eng] 41-3905
- SNOTEL meteor burst telemetry system. Crook, A.G., [1986, p.411-418, eng] 41-3906
- Stream water temperature observations in Langtang Khola, Nepal Himalayas. Suzuki, M., et al, [1987, p.25-28, eng] 41-3911
- Spatial analysis of snow- and rain-generated highflows in southern Ontario. Irvine, K.N., et al, [1987, p.140-149, eng] 41-4076
- Forest harvest, snowmelt and streamflow in the central Sierra Nevada. MacDonald, L.H., [1987, p.273-283, eng] 41-4317
- Sediment transport in the Susitna River basin, Alaska, 1983-1984. Knott, J.M., et al, [1986, 73p., eng] 41-4323
- See also: River flow; Runoff
- Streams**
- Effects of road de-icing salt on stream invertebrates. Kersey, K., [1981, 21p., eng] 41-240
- Sources of organic nitrogen, phosphorus and carbon in antarctic streams. Downes, M.T., et al, [1986, p.215-225, eng] 41-613
- Influence of moraines on turbidity of glacial waters. Tikhonovskaya, A.A., et al, [1986, p.123-128, rus] 41-783
- Antarctic stream ecosystems: variability in environmental properties and algal community structure. Howard-Williams, C., et al, [1986, p.511-544, eng] 41-1558
- Strength**
- See: Bearing strength; Concrete strength; Flexural strength; Frozen ground strength; Frozen rock strength; Ice cover strength; Ice strength; Snow strength; Soil strength; Torsional strength
- Stress relaxation**
- See: Relaxation (mechanics)
- Stress strain diagrams**
- In-ice field measurements for an ice load estimation. Niemenheito, J.J., et al, [1986, p.762-778, eng] 41-1131
- Borehole closure at Mizuho Station. Kawada, K., et al, [1986, p.127-135, eng] 41-3659
- Volume expansion of a 413.5-m Mizuho core after its recovery. Nakawo, M., [1986, p.78-85, eng] 41-3661
- Formation of loads on underground structures in thawing disperse ground. Sokolov, M., [1986, p.24-25, rus] 41-3735
- Stresses**
- Stability of gravity platform foundation. Hoddinott, T., et al, [1986, p.66-73, eng] 41-358
- Laboratory soil testing for design of arctic offshore structures. Saada, A.S., et al, [1986, p.137-149, eng] 41-359
- Surface features of Ice Stream B, Marie Byrd Land, West Antarctica. Vornberger, P.L., et al, [1986, p.168-170, eng] 41-411
- Effects of ice thickness and surface slope on glacier flow. Kamb, B., et al, [1986, p.267-284, eng] 41-688
- Glacier flow response to perturbations in ice thickness and surface slope. Echelmeyer, K.A., et al, [1986, p.285-298, eng] 41-689
- Stresses in the hydraulic backfill. Knutsson, S., [1981, p.261-268, eng] 41-790
- West Antarctic ice sheet dynamics. Van der Veen, C.J., [1985, p.732-734, eng] 41-983
- Reinforced ice as a construction material—creep of reinforced ice beams. Grabe, G., [1986, p.793-806, eng] 41-1133
- Material selection and fabrication recommendations for arctic offshore structures. Lohne, P.W., [1986, p.897-910, eng] 41-1137
- Internal stresses in frozen ground: Discussion. Konrad, J.M., [1986, p.408-410, eng] 41-1162
- Stresses in the upper layer of the Hans Glacier, Spitzbergen. Cichowicz, A., [1986, p.13-19, eng] 41-1253
- Scaling in ice fracture mechanics. Atkins, A.G., [1986, p.67-73, eng] 41-1583
- High speed borehole pressuremeter to measure the crushing strength of ice. Michel, B., et al, [1986, p.187-208, eng] 41-1592
- Ice stress measurements in a rubble field surrounding a caisson-retained island. Sayed, M., et al, [1986, p.255-262, eng] 41-1597
- Effect of hydrostatic stress on creep of a frozen sand. Domaschuk, L., et al, [1987, p.119-124, eng] 41-2412
- Determining the creep properties of ice. Ladanyi, B., et al, [1987, p.253-259, eng] 41-2429
- Explicit technique for calculating first year ice loads on structures. Walden, J.T., et al, [1987, p.267-272, eng] 41-2431
- Force budget of ice sheets. Whillans, I.M., [1987, p.17-36, eng] 41-2462
- Designing filled-up piers with ice-bearing cores. Sokolov, A.V., [1986, p.34-42, rus] 41-2909
- Internal waves in the Arctic Ocean: a review. Morison, J., [1986, p.1163-1183, eng] 41-3005
- Unconfined ice-shelf flow. Morland, L.W., [1987, p.99-116, eng] 41-3276
- Ice-shelf backpressure: form drag versus dynamic drag. MacAyeal, D.R., [1987, p.141-160, eng] 41-3278
- Longitudinal stresses and basal sliding: a comparative study. Van der Veen, C.J., [1987, p.223-248, eng] 41-3283

**Stresses (cont.)**

- Verification tests for a stiff inclusion stress sensor. Cox, G.F.N., et al, [1987, p.81-88, eng] **41-3301**
- Simultaneous calculation of temperature and stresses in freezing-thawing ground. Ukhov, S.B., et al, [1986, p.96-106, rus] **41-3452**
- Investigation of moisture movements and stresses in frozen soils. Williams, P.J., et al, [1982, 46p., eng] **41-3499**
- Ice stress panel results, Issungnak 1980. McGonigal, D., [1981, 14p. + figs., eng] **41-3553**
- Stresses in the snow cover on a mountain slope. Ohizumi, M., [1986, p.54-97, eng] **41-3846**
- Stress in a wavy snow cover on a plane slope. Yoshida, Z., et al, [1986, p.27-36, jpn] **41-3877**
- Wind stress over rough ice at the ice edge zone, 1984. Anderson, R.J., [1987, p.3-6941, eng] **41-4249**
- Constitutive law for sea ice and some applications. Häkkinen, S., [1987, p.81-53, eng] **41-4275**
- Stress-gradient coupling in glacier flow: IV. Effects of the "T" term. Kamb, B., et al, [1986, p.342-349, eng] **41-4286**
- Pipeline frost heave predictions. Nixon, J.F., [1987, p.109-114, eng] **41-4631**

See also: Shear stress; Thermal stresses

**Striations**

See: Ice scoring

**Structural analysis**

- Growth mechanisms in aggradation palaeas. Outcalt, S.I., et al, [1984, p.65-78, eng] **41-626**
- Structural anomalies in ice-forming silver iodide aerosols. Borovoi, N.A., et al, [1986, p.97-99, rus] **41-1454**
- Pingos and palaeas in northernmost Sweden. Lagerbäck, R., et al, [1986, p.149-154, eng] **41-1873**

**Structures**

- On the scale effect in ice mechanics. Bercha, F.G., [1977, p.65-66, eng] **41-975**
- Field performance of an ice force panel for *in situ* and structural measurements. Witney, K.C., et al, [1986, p.241-261, eng] **41-1100**
- Transportation of heavy modules to the Arctic. Kirkeide, K.L., et al, [1986, p.1160-1168, eng] **41-1151**
- Response of floating ice beams and plates with partial flooding. Kerr, A.D., [1986, p.75-86, eng] **41-1584**
- Ice force oscillator model for dynamic ice-structure interaction analysis. Xu, J., et al, [1986, p.391-196, eng] **41-1606**
- Comparison between the creep and the plastic analysis of ice forces by the FEM. Pulkkinen, E., [1986, p.421-430, eng] **41-1609**
- Building yard trials for avalanche protection structures. Menegus, F., et al, [1986, p.28-36, ita] **41-2235**
- Influence of moisture on heat transfer in structures. Kohonen, R., [1987, 56p., fin] **41-3843**
- Modeling of snow-block impact on structures. Mead, L.B., et al, [1986, p.321-324, eng] **41-4283**

See also specific types of structures

**Styrofoam**

See: Cellular plastics

**Subarctic landscapes**

- Alpine phytocenotic systems of the Subarctic. Norin, B.N., ed, [1986, 292p., rus] **41-1344**
- Introduction of aconites into the Subarctic. Gorelova, A.P., [1986, 116p., rus] **41-1927**
- Hydraulic power construction in the North. Kuperman, V.L., et al, [1987, 304p., rus] **41-3013**
- Combined use of vegetational resources in the north European USSR. Chertovskoi, V.G., [1985, p.26-31, rus] **41-3434**
- Environmental protection in Siberia. Vorob'ev, V.V., [1985, p.52-60, rus] **41-3436**
- Remote sensing methods of studying natural resources of Siberia. Sharapov, V.N., ed, [1986, 192p., rus] **41-3513**

- Spaceborne photography methods of monitoring geosystems in the new economic development areas of Siberia. Plastinin, L.A., [1986, p.9-14, rus] **41-3514**
- Influence of natural environments on economic development of the North. Okiaheva, L.N., [1986, p.17-19, rus] **41-4062**

See also: Subpolar regions

**Subglacial caves**

- Karst ground water activity in permafrost of Canada. Ford, D.C., [1984, p.340-350, eng] **41-2118**
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al, [1987, p.249-285, eng] **41-3284**
- Hydraulics of subglacial cavities. Walder, J.S., [1986, p.439-445, eng] **41-4299**

**Subglacial drainage**

- Hydrology of the Baykal Amur Railroad area. Dobroumou, B.M., ed, [1986, 135p., rus] **41-420**
- River ice cover and winter drainage in the BAM zone. Sokolov, B.L., et al, [1986, p.11-33, rus] **41-422**
- Formation of ice-marginal embankments into ice-dammed lakes, Pleistocene. Booth, D.B., [1986, p.247-263, eng] **41-563**
- Cause of Jökulhlaups in the Skaftá River, Vatnajökull. Björnsson, H., [1977, p.71-78, eng] **41-589**
- Some observations on subglacial ground-water flow. Smart, C.C., [1986, p.224-231, eng] **41-683**

- Delineation of glacier drainage basins on Hofsjökull and Western Vatnajökull. Björnsson, H., [1986, p.19-21, eng] **41-731**

- Velocity measurements on Dagaard-Jensen Glacier, Scoresbyund, East Greenland. Reeh, N., et al, [1986, p.146-150, eng] **41-758**

- Report of jökulhlaups in 1981, 1982 and 1983. Rist, S., [1984, p.165-172, ice] **41-809**

- Hydraulic effects at the glacier bed and related phenomena. [1986, 148p., eng] **41-961**

- Hydrolithosphere and subsurface ice on Mars. Battistini, R., [1985, p.607-617, eng] **41-1726**

- Measuring glacier fluctuation. Clarke, G.K.C., et al, [1986, p.727-733, eng] **41-1931**

- Glacio-fluvial sediment transfer. Gurnell, A.M., ed, [1987, 524p., eng] **41-3124**

- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al, [1987, p.249-285, eng] **41-3284**

- Heat budget of the Ross drainage basin. Oerlemans, J., [1987, p.287-292, eng] **41-3285**

- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] **41-3286**

- Glacier-dammed lake investigations in the Hullet Lake area, South Greenland. Dawson, A.G., [1983, 24p., eng] **41-3302**

- Subglacial drainage for an ice sheet resting upon a layered deformable bed. Shoemaker, E.M., et al, [1987, p.4935-4946, eng] **41-3342**

- Ice cap's marginal zone in connection with hydraulic power research. Thomsen, H.H., [1983, 24p., dan] **41-3893**

- Discharge from a glacier in West Kunlun Mts., China. Nakawo, M., et al, [1987, p.111-114, eng] **41-3922**

- Basal water and high-pressure basal ice. Weertman, J., [1986, p.455-463, eng] **41-4301**

- Seasat altimeter observations of an antarctic "lake". Cudlip, W., et al, [1987, p.55-59, eng] **41-4435**

- Subglacial navigation. Evolution and potential of the Arctic submarine. McLaren, A.S., [1985, p.448-453, eng] **41-226**

- Thermal hole opener. Hansen, D.P., [1987, p.51-56, eng] **41-4215**

- Subglacial observations. Automatic Arctic profiling system for oceanography under ice. Van Leer, J.C., [1985, p.433-436, eng] **41-223**

- Device and procedure for subglacial water sampling. Nasrov, G., [1983, p.60-61, rus] **41-1828**

- Primary production in the Bratke reservoir. Part 2. Assimilation of carbon by phytoplankton. Pautova, V.N., et al, [1986, p.50-58, rus] **41-1834**

- Under-ice topography in the Arctic basin. McLaren, A.S., [1986, 16p., eng] **41-1932**

- All-Union conference on ecology and biological productivity of the Barents Sea, Murmansk, July 1986. Summaries. [1986, 268p., rus] **41-2384**

- Recent trends in studying the ecology of Polar seas of the Arctic. Matishov, G.G., [1986, p.1-5, rus] **41-2385**

- Peculiarities of ecosystems distribution in the Barents Sea. Golikov, A.N., et al, [1986, p.7-8, rus] **41-2386**

- Diatoms beneath the Greenland ice and climatic changes. Harwood, D.M., [1986, p.304-308, eng] **41-2688**

- Mesoscale oceanographic processes beneath the ice of Fram Strait. Manley, T.O., et al, [1987, p.432-434, eng] **41-2804**

- Oceanic inclusions in the J-9 sea-ice core. Zotikov, I.A., et al, [1985, p.113-115, eng] **41-2952**

- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] **41-3280**

- Onset of natural convection and heat transfer in a layer of water below melting ice. Engilberger, W., et al, [1986, p.1799-1804, eng] **41-3298**

- On the response of the fjord Gullmaren under ice cover. Djurfeldt, L., [1987, p.1557-1567, eng] **41-3345**

- Use of acoustics in localizing under-ice oil spills. Francois, R.E., et al, [1983, 17p., eng] **41-3927**

- Sulphide in subglacial exploration, St. Elias Mts., B.C. Day, S.J., et al, [1987, p.723-730, eng] **41-4080**

- Imaging subglacial topography by a synthetic aperture radar technique. Musil, G.J., et al, [1987, p.170-175, eng] **41-4453**

- Subgrade maintenance. Road design, allowing for climatic impact on traffic conditions. Vasil'ev, A.P., [1986, 248p., rus] **41-2894**

- Subgrade soils. Soil-aggregate-fabric systems in frost susceptible roads. Hoover, J.M., et al, [1981, p.6-14, eng] **41-1038**

- Designing routes for complicated geological and climatic conditions in plains. Skutin, A.I., [1984, p.66-74, rus] **41-2455**

- Setting standards for water-resistance properties of road pavement materials for Siberian conditions. Shabanov, V.M., [1986, p.106-110, rus] **41-2758**

- Frost heave compliance testing in Scotland. Fairley, H.G., [1981, p.57-62, eng] **41-2927**

See also: Foundations

**Sublimation**

- Porous medium physical model of frost layers. Meng, F., et al, [1987, p.584-593, eng] **41-3402**

See also: Ice sublimation; Snow evaporation

**Submarine geology**

See: Marine geology

**Submarine permafrost**

See: Subsea permafrost

**Submarine topography**

See: Bottom topography; Ocean bottom

**Submarines**

- Evolution and potential of the Arctic submarine. McLaren, A.S., [1985, p.448-453, eng] **41-226**

- Sea water density and submarine operation in the Arctic. Frost, M.E., [1986, p.1-30, eng] **41-2653**

**Subpermafrost ground water**

- Some modeling problems related to the theory of nales. Dement'eva, O.V., [1982, p.162-165, rus] **41-1443**

- Water resources of the BAM zone. Sokolov, A.A., [1986, 16p. (pertinent p.146-151), rus] **41-2228**

- Theoretical and application problems concerning air exchange in deep quarries (Summaries of reports presented at the All-Union conference held in Apatity, Sep. 23-25, 1985). Vasserman, A.D., ed, [1985, 178p., rus] **41-2769**

- Using subpermafrost ground water in normalizing the air in the Mir pipe quarry. Prudnikov, V.K., [1985, p.144-145, rus] **41-2772**

- Water resources of the Yakut ASSR and their use. Nogovitsyn, D.D., [1985, 124p., rus] **41-3432**

**Subpolar regions**

- Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al, [1986, p.72-80, rus] **41-2250**

See also: Subarctic landscapes

**Subsea permafrost**

- Gas hydrates and Arctic offshore research. [1986, 241p., eng] **41-365**

- Monitoring seasonal changes in seafloor temperature and salinity. Selmann, P.V., et al, [1986, p.110-114, eng] **41-369**

- Modeling of marine fiber reinforced concrete and frozen soil. Reddy, D.V., et al, [1985, p.845-856, eng] **41-670**

- Offshore development in northern Canada and Alaska. Minion, R., comp, [1985, 83p., eng] **41-823**

- Shore processes in the coastal zone of western Yamal. Smirnov, V.M., [1986, p.425-428, rus] **41-887**

- Understanding the Arctic sea floor for engineering. [1982, 141p., eng] **41-893**

- Report of activities, 1984-1985. [1986, 21p., eng] **41-1678**

- Workshop on Subsea Permafrost and Pipelines in Permafrost, 1985. [1986, 168p., eng] **41-2507**

- Drilling and sampling offshore permafrost. Ruffell, J.P., [1986, p.11-15, eng] **41-2509**

- Review of subsea permafrost conditions along Alaska's coasts. Osterkamp, T.E., [1986, p.16-23, eng] **41-2510**

- Impact of offshore permafrost on oil and gas production. Graham, C.A., [1986, p.35-47, eng] **41-2512**

- Subsea permafrost: summary of discussion and research needs. [1986, p.48-49, eng] **41-2513**

- Permafrost formation in littoral and sublittoral zones of northern Eurasia. Maslov, A.D., [1986, p.79-85, rus] **41-2539**

- Shoreline evolution at a retreating Arctic coastal site. Reimnitz, E., et al, [1987, p.161-164, eng] **41-3469**

- Coastal processes along the west coast of Yamal. Smirnov, V.M., [1986, p.317-321, eng] **41-3623**

- Shelf: the relief, sediments and their formation. Ionin, A.S., et al, [1987, 205p. (Pertinent p.53-80), rus] **41-3688**

- Thermal simulation of subsea saline permafrost. Nixon, J.F., [1986, p.2039-2046, eng] **41-4077**

- Subsidence. Understanding the Arctic sea floor for engineering. [1982, 141p., eng] **41-893**

**Subsurface drainage**

- Reservoir with a submerged outlet tunnel during winter. Tvede, A.M., [1986, p.399-406, eng] **41-4518**

**Sunlight**

- Scattering and absorption of visible light by sea ice. Buckley, R.G., et al, [1987, p.867-869, eng] 41-3639

**Supercooled clouds**

- Extended summaries from Conference on Cloud Physics, 1982. [1982, 587p., eng] 41-1  
Composition of unrimed and rimed snow crystals. Borys, R.D., et al, [1982, p.61-62, eng] 41-4  
Contact ice nucleation by submicron atmospheric aerosols. Deshler, T., [1982, p.111-114, eng] 41-9  
Measurements of natural ice nuclei. Rogers, D.C., [1982, p.115-118, eng] 41-10  
Observed changes in ice crystal type in thick stratiform clouds. Dyer, R.M., et al, [1982, p.201-202, eng] 41-15  
High altitude tropical cirrus cloud observations. Booker, D.R., et al, [1982, p.215-217, eng] 41-19  
Orographic layer cloud structure. Sassen, K., [1982, p.318-321, eng] 41-23  
Simulation of orographic clouds with a nonlinear, time-dependent model. Cotton, W.R., et al, [1982, p.322-324, eng] 41-24  
Echo formation in Colorado cumulus. Knight, C.A., et al, [1982, p.342-345, eng] 41-30  
Ice crystal production in cumulus. Cerni, T.A., [1982, p.346-349, eng] 41-31  
Liquid water limitation to ice particle growth. Super, A.B., et al, [1982, p.350-353, eng] 41-32  
Sensitivity to cloud microphysical processes. Cotton, W.R., et al, [1982, p.358-361, eng] 41-34  
Graupel characteristics in relation to the dynamics of Florida cumuli. Walah, P.A., et al, [1982, p.362-365, eng] 41-35  
Case study of hydrometeors in Florida cumuli. Parungo, F., et al, [1982, p.366-369, eng] 41-36  
Microphysical processes in supercooled cumuli. Xu, J.-L., et al, [1982, p.370-373, eng] 41-37  
Glaciating of Montana and Florida summer cumuli. Lamb, D., et al, [1982, p.374-377, eng] 41-38  
Snowflake aggregation near the melting layer in stratiform clouds. Newman, S.B., [1982, p.381-383, eng] 41-40  
On the melting of graupel and frozen raindrops. Johnson, D.B., et al, [1982, p.384-387, eng] 41-41  
Spectra and liquid water content in aircraft icing environments. Glass, M., [1982, p.400-403, eng] 41-43  
Characteristics of icing conditions in wintertime stratiform clouds. Politovich, M.K., [1982, p.404-407, eng] 41-44  
Liquid water and drop size in supercooled clouds. Jeck, R.K., [1982, p.408-411, eng] 41-45  
Cloud particles near melting layer. Kropfli, R.A., et al, [1982, p.412-415, eng] 41-46  
Microphysical influences on aircraft icing. Politovich, M.K., [1982, p.420-422, eng] 41-47  
Hail formation in an Oklahoma multicell storm. Ziegler, C.L., et al, [1982, p.427-430, eng] 41-49  
New clues for decoding hailstone structure. Pflaum, J.C., et al, [1982, p.446-449, eng] 41-54  
Ice and supercooled water evolution in convective clouds. Rodi, A.R., [1982, p.465-468, eng] 41-58  
Supercooled liquid water and ice crystal distribution in winter storms. Heggli, M., et al, [1982, p.469-472, eng] 41-59  
Radar and aircraft observations of generating cells. Martner, B.E., [1982, p.473-476, eng] 41-60  
Cloud liquid water in orographic storms. Rauber, R.M., et al, [1982, p.477-480, eng] 41-61  
Microphysical growth processes in orographic clouds. Blumenstein, R.R., et al, [1982, p.481-484, eng] 41-62  
Study of ice crystal formation in a stably stratified orographic cloud. DeMott, P.J., et al, [1982, p.488-490, eng] 41-64  
Winter cumulus electrification in an axisymmetric cloud model. Takahashi, T., [1982, p.554-557, eng] 41-66  
Ice particle charge in convective clouds. Hallett, J., et al, [1982, p.566-567, eng] 41-67  
Riming and snowflake electrification in stratiform clouds. Bauer, C.F., et al, [1982, p.568-569, eng] 41-68  
Deep OC isothermal layers within precipitation bands. Stewart, R.E., [1982, p.570-571, eng] 41-69  
Budget analysis of liquid water, vapor and ice in orographic clouds. Uttal, T., et al, [1982, p.572-575, eng] 41-70  
Ice crystal concentration in orographic clouds. Grant, L.O., et al, [1982, p.584-587, eng] 41-71  
Interaction of clouds with the surrounding aerosol medium. Mazin, I.P., [1982, p.42-48, eng] 41-1006  
Use of ground smoke-generators in mountains. Laktionov, A.G., [1982, p.68-73, eng] 41-1007  
Cloud physics and modification. Zabolotskaia, T.N., ed, [1986, 113p., rus] 41-1447  
Possibilities of dispersing supercooled stratiform clouds and fog of large vertical extension. Voronov, G.S., [1986, p.31-43, rus] 41-1449  
Computerized simulation of artificial seeding of clouds containing ice crystals. Bulkov, M.V., et al, [1986, p.3-16, rus] 41-1555  
Airborne ice crystal concentration counters. Volkov, A.D., et al, [1986, p.99-107, rus] 41-1556

- Numerical simulation of the artificial precipitation zone induced by seeding stratiform clouds with nucleating agents. Khvorost'ianov, V.I., et al, [1986, p.63-76, rus] 41-1902  
Crystallization of motionless supercooled water. Smorygin, G.I., [1986, p.16-23, rus] 41-2148  
Surface icing of different materials. Golubev, V.N., [1986, p.121-128, rus] 41-2164  
Small-volume fog chamber with automatic recording of ice crystals. Gorbunov, B.Z., et al, [1986, p.248-249, eng] 41-3161  
Lidar-radiometric method for determining the ice water content of cirrus clouds. Zhuravleva, V.A., et al, [1986, p.32-38, eng] 41-3251  
Freezing of cloud droplets at low moisture and pressure. Burchuladze, N.N., et al, [1986, p.20-31, rus] 41-3463  
Influence of electric fields on freezing of supercooled water drops. Shlykov, V.V., [1986, p.32-40, rus] 41-3464  
Problems of cloud physics. Voloshchuk, N.I., ed, [1986, 249p., rus] 41-3669  
Numerical simulation of the evolution of seeded supercooled stratiform clouds. Bakhanov, V.P., et al, [1986, p.26-41, rus] 41-3670  
Cloud ice and wintertime storms over the mountains of northern Colorado. Rauber, R.M., [1987, p.488-524, eng] 41-3761  
Aerosol properties in the atmospheric surface layer in Severnaya Zemlya archipelago. Timerev, A.A., [1986, p.108-113, rus] 41-3867  
Ice particle evolution in the anvil of a severe thunderstorm. Heymsfield, A.J., [1986, p.2463-2478, eng] 41-4052  
International Cloud Physics Conference, 9th, Tallin, 1984. [1984, 3 vols. (235p.), eng] 41-4369  
Supercooled liquid water in winter orographic clouds. Henderson, T.J., [1984, p.19-24, eng] 41-4370  
Spatial and temporal variations of supercooled water during mountain storms. Rauber, R.M., et al, [1984, p.47-50, eng] 41-4371  
Dominant ice processes in summertime cumulus clouds in the Bethlehem area. Bruintjes, R.T., [1984, p.63-66, eng] 41-4372  
Ice particles in marine and continental clouds. Hobbs, P.V., et al, [1984, p.71-72, eng] 41-4374  
On snow particles comprising an aggregate. Fujiyoshi, Y., et al, [1984, p.87-90, eng] 41-4376  
Microphysical structures of hailstones observed on the Xizang plateau. Guo, E., [1984, p.91-94, eng] 41-4377  
Mechanism of habit development in diffusional ice crystal growth. Fukuta, N., et al, [1984, p.159-162, eng] 41-4381  
Laboratory simulations of graupel growth. Griggs, D.J., et al, [1984, p.163-166, eng] 41-4382  
Coalescence kinetic equations for cloud droplets and ice particles. Yenukashvili, I.M., [1984, p.247-248, eng] 41-4393  
Numerical model of stratiform cloud. Hu, Z., et al, [1984, p.617-619, eng] 41-4410  
Dynamics, microphysics, radiation and ice phase in clouds and fog. Khvorost'ianov, V.I., et al, [1984, p.625-628, eng] 41-4411  
Role of ice crystals on ice accretion processes. Gayet, J.F., et al, [1984, p.737-740, eng] 41-4415  
Wintertime, supercooled cloud variables up to 3 km a.g.l. Jeck, R.K., [1984, p.741-744, eng] 41-4416  
Passive-active radar sounding of convective clouds. Bobylev, L.P., et al, [1984, p.769-772, eng] 41-4417  
Dual polarisation radar measurements of the evolution of ice in clouds. Illingworth, A.J., et al, [1984, p.787-790, eng] 41-4418  
Cloud water freezing accompanied by electrocrystallization potentials. Kolev, S., et al, [1984, p.793-796, eng] 41-4420  
Orographic cloud microphysical observations with a microwave radiometer. Sassen, K., [1984, p.801-804, eng] 41-4421  
Bispectral method for the height determination of optically thin ice clouds. Wendling, P., et al, [1984, p.827-830, eng] 41-4422  
Measurement of the entrainment of sulfur dioxide by rime ice. Lamb, D., et al, [1987, p.1765-1772, eng] 41-4538  
**Supercooled fog**  
Ice crystal growth in a supercooled cloud tunnel. Fukuta, N., et al, [1982, p.325-328, eng] 41-25  
Cloud physics and modification. Zabolotskaia, T.N., ed, [1986, 113p., rus] 41-1447  
Possibilities of dispersing supercooled stratiform clouds and fog of large vertical extension. Voronov, G.S., [1986, p.31-43, rus] 41-1449  
Formation of a microscopic ice filament in an electric field. Aksutova, L.K., et al, [1985, p.619-620, eng] 41-2330  
Small-volume fog chamber with automatic recording of ice crystals. Gorbunov, B.Z., et al, [1986, p.248-249, eng] 41-3161  
Formation kinetics of ice crystals on aerosol particles in supercooled fog. Effect of water vapor exhaustion. Gorbunov, B.Z., et al, [1986, p.333-334, eng] 41-3162

- Aerosol properties in the atmospheric surface layer in Severnaya Zemlya archipelago. Timerev, A.A., [1986, p.108-113, rus] 41-3867  
Influence of water vapor depletion on ice nucleation of supercooled fog. Gorbunov, B.Z., et al, [1987, p.261-267, eng] 41-4362  
Ice crystal dynamics during ice nucleation of supercooled fog. Pashenko, A.E., et al, [1987, p.269-275, eng] 41-4363  
Microphysical origin of graupel and hail. Fukuta, N., et al, [1984, p.257-260, eng] 41-4395  
**Supercooling**  
Thermodynamic properties of metastable systems and the kinetics of phase transformations. Nikitin, E.D., ed, [1985, 87p., rus] 41-552  
Supercooling and crystallization of water, heavy water and organic substances. Bogdanov, N.M., et al, [1985, p.30-43, rus] 41-553  
Periodic phase transformations in liquids. Akulichev, V.A., et al, [1986, 280p., rus] 41-1271  
Constitutional supercooling in natural ice. Jones, R.E., [1985, p.188-196, eng] 41-1494  
Anomalous streamer discharge in air with supercooled steam and its luminescence. Votekhovskii, M.B., [1986, p.351-354, rus] 41-1628  
Neutron scattering of supercooled water in silica gels. Poinson, C., et al, [1986, p.3447-3459, eng] 41-2479  
Ice growth in supercooled solutions of antifreeze glycoprotein. Harrison, K., et al, [1987, p.241-243, eng] 41-4228  
Metastable water at subzero temperatures. Franks, F., [1986, p.243-249, eng] 41-4359  
**Supersaturation**  
Metastable water at subzero temperatures. Franks, F., [1986, p.243-249, eng] 41-4359  
Ice crystal growth at different temperature and ice supersaturation. Wang, A.S., et al, [1984, p.183-186, eng] 41-4388  
**Supplies**  
See: Logistics  
**Supports**  
Welded groove-and-tongue profiles for high strength bulwarks. Kuznetsov, A.I., et al, [1986, p.26-28, rus] 41-1534  
Calculating pile foundations for hydraulic structures. Levachev, S.N., et al, [1986, 133p., rus] 41-1747  
Frozen ice-shingle-gravel mixtures for roof supports in northern mines. Markov, V.S., et al, [1986, p.201-208, rus] 41-2179  
Hydraulic construction in ports and engineering research in coastal zones of seas. Kostiuuk, V.D., ed, [1986, 169p., rus] 41-2709  
Interaction of pressure ridges with cylindrical supports of hydraulic structures. Belov, A.B., et al, [1986, p.34-37, rus] 41-2710  
Classification of means of ballasting and fastening pipelines. Vasil'ev, N.P., et al, [1986, p.20-21, rus] 41-2782  
Construction of structures and foundations by the grout curtain method. Smorodinov, M.I., et al, [1986, 216p., rus] 41-2886  
Determining the state of stress in shaft timbering during thawing. Abashin, S.I., et al, [1986, p.28-29, rus] 41-3769  
Studying the effect of ground conditions on strength and stability of no-pilework bridge supports exposed to moving ice. Zhordochko, I.O., et al, [1987, p.101-104, rus] 41-3792  
Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed, [1986, 81p., rus] 41-4546  
Selection of parameters for shaft pillars of placer mines. Panishev, V.V., [1986, p.7-10, rus] 41-4548  
Roof supports used in mines of permafrost areas. Efremov, A.P., et al, [1986, p.30-33, rus] 41-4552  
Ice-pillar roof supports in northern mines. Stoliarov, A.M., et al, [1986, p.38-47, rus] 41-4554  
See also: Power line supports  
**Suprapermafrost ground water**  
Hydrochemical regime of lake and suprapermafrost ground water in alassy. Shishkina, N.P., [1985, p.110-130, rus] 41-258  
Influence of suprapermafrost ground waters on the active layer. Pichuev, V.V., [1985, p.86-87, rus] 41-317  
Water resources of the BAM zone. Sokolov, A.A., [1986, 166p. (pertinent p.146-151), rus] 41-2228  
Water resources of the Yakut ASSR and their use. Nogovitsyn, D.D., [1985, 124p., rus] 41-3432  
**Surface drainage**  
Hydrologic investigations in the Mimer River basin (Spitsbergen) in 1983. Gokhman, V.V., et al, [1986, p.161-166, rus] 41-127  
Hydrological investigations in the Mimer River basin, Svalbard, in 1983. Gokhman, V.V., et al, [1986, p.309-316, eng] 41-3622  
**Surface effect vehicles**  
See: Air cushion vehicles  
**Surface properties**  
Influence of surface conditions on surface temperature. Kinney, T.C., et al, [1986, p.1-15, eng] 41-640

**Surface properties (cont.)**

- Theodolite measurements of fast moving glaciers. Dahl-Jensen, D., et al, [1986, p.42-46, eng] **41-736**  
 Importance of the tectonic motions on Ganymede. Forni, O.P., et al, [1985, p.759-766, eng] **41-1736**  
 Under-ice topography of the Arctic Basin. McLaren, A.S., [1986, p.165-191, eng] **41-2658**  
 Characterization of recycled asphalt mixtures and their pavement performance. Yamada, M., [1987, p.813-828, eng] **41-4044**

See also: Glacier surfaces; Ice surface; Microrelief; Snow surface

**Surface roughness**

- Roughness and transfer coefficients over snow and sea ice. Andreas, E.L., [1986, 19p., eng] **41-1263**  
 Observation of the surface roughness of sea ice using an X-band radar. Aota, M., et al, [1986, p.45-58, jpn] **41-3879**

See also: Roughness coefficient

**Surface structure**

- Surface topography of large ice masses from Landsat imagery. Dowdeswell, J.A., et al, [1987, p.16-23, eng] **41-3591**  
 Flow and surface structure of Tyndall Glacier, the Southern Patagonia Icefield. Naruse, R., et al, [1987, p.133-140, eng] **41-3838**  
 Ground and satellite measurement of ice sheets, Queen Maud Land. Fujii, Y., et al, [1987, p.72-75, eng] **41-4438**

**Surface temperature**

- Influence of surface conditions on surface temperature. Kinne, C., et al, [1986, p.1-15, eng] **41-640**  
 New method of measuring the snow-surface temperature. Andri, E.L., [1986, p.139-156, eng] **41-1285**  
 Low pressure weather systems in and around Norwegian waters. Billelo, M.A., [1986, p.53-66, eng] **41-1799**  
 Large lakes as ocean-simulating models. Kondrat'ev, K.I.A., et al, [1986, 63p., rus] **41-2362**  
 Ground surface temperature above underground oil pipelines. Tikhomirov, A.L., et al, [1986, p.94-97, rus] **41-2757**  
 Direct contact melting heat transfer on a heated surface. Saito, A., et al, [1986, p.1805-1810, eng] **41-3299**  
 Tobliss Glacier (glaciological and hydrometeorological investigations). Giginishvili, G.N., ed, [1986, 116p., rus] **41-3367**  
 Satellite based sea surface temperature determination. Walton, C., [1987, 58p., eng] **41-3570**  
 Calculating heat balance constituents of soil surface. Konstantinov, A.R., et al, [1986, p.62-66, eng] **41-3679**  
 Calculating frost penetration into rocks of a cylindrical cavity. Dugar'tyrenov, A.V., et al, [1986, p.21-24, rus] **41-3770**

**Surface waters**

- Effect of salting on surface and ground water. Bischofsberger, W., [1987, p.192-197, ger] **41-4519**

**Surfactants**

- Concretes for high dams. Sudakov, V.B., ed, [1985, 101p., rus] **41-413**  
 Methods of estimating the efficiency of new surface-active additives. Sudakov, V.B., et al, [1985, p.3-9, rus] **41-414**  
 New air-entrainment and plastifying admixture for concretes. Berger, T.F., et al, [1985, p.9-13, rus] **41-415**  
 Concretes with complex admixtures for the Sayano-Shushenskaya dam. Ginzburg, Ts.G., et al, [1985, p.71-73, rus] **41-419**  
 Interaction of polymer admixtures with cements in concretes. Kozlova, V.K., et al, [1986, p.59-62, rus] **41-2756**  
 Criteria of concrete frost resistance. Dvorkin, L.L., [1986, p.105-109, rus] **41-3665**

**Surging glaciers**

See: Glacier surges

**Surveys**

- Landscape indication methods of interpretation used in forest tundra surveys. Kiuntsel', V.V., [1986, p.118-121, rus] **41-1539**  
 Organic soils. Rubinshtein, A.I.A., [1986, 89p., rus] **41-2729**  
 Changes in engineering-geocryological conditions induced by economic development. Nevecheria, V.L., et al, [1986, p.184-191, rus] **41-2839**  
 Spaceborne photography methods of monitoring geosystems in the new economic development areas of Siberia. Platinin, L.A., [1986, p.9-14, rus] **41-3514**  
 Southern boundary of Permafrost distribution within the West Siberian Plain. Trofimov, V.T., et al, [1986, p.106-113, rus] **41-3776**  
 Or, in and evolution of Goes Lake, Spitsbergen. Grzes, M.G., et al, [1986, p.122-124, 233-234, rus] **41-4355**  
 Possibilities of the landscape-indication method for engineering-geological studies of northern West Siberia. Bondarik, G.K., et al, [1987, p.15-29, rus] **41-4621**  
 See also: Aerial surveys; Geodetic surveys; Geological surveys; Geophysical surveys; Glacier surveys; Ice surveys; Infrared reconnaissance; Magnetic surveys; Oceanographic surveys; Photogrammetric surveys; Route surveys; Seismic surveys; Site surveys; Snow surveys; Soil surveys; Topographic surveys

**Survival**

See: Cold weather survival

**Suspended sediments**

- Glacio-fluvial sediment transfer. Gurnell, A.M., ed, [1987, 524p., eng] **41-3124**  
 Phytoplankton in marine sediments of Frobisher Bay. Hsiao, S.I.C., [1987, p.245-251, eng] **41-3685**  
 Suspended sediments in a glaciated watershed of Langtang Valley, Nepal. Ohta, T., et al, [1987, p.19-24, eng] **41-3910**

**Swamps**

- Factors controlling ground frost on an alpine mire in Kuusamo, Finland. Koutaniemi, L., et al, [1986, p.60-67, fin] **41-187**  
 Structure and dynamics of forest landscapes in Karelia. Belousova, N.A., ed, [1985, 184p., rus] **41-189**  
 Identification of regional features of West Siberian swamps on space photographs. Gorozhankina, S.M., [1986, p.29-37, rus] **41-817**  
 Strength and filtration properties of water-saturated peats in a detonation zone. Smirnov, A.G., et al, [1986, p.115-118, rus] **41-906**  
 Alaskan atmospheric methane sources. Sebach, D.I., et al, [1986, p.1-10, eng] **41-1259**  
 Human factor impacts on Siberian floodplains during land reclamation. Malik, L.K., [1986, p.64-71, rus] **41-1367**  
 Caterpillar and wheeled hauling-tractors. Platonov, V.F., et al, [1986, 295p., rus] **41-1688**  
 Primary successions of Arctic tundras on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.99-105, rus] **41-1820**  
 Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., [1986, p.49-67, rus] **41-1822**  
 Road construction in Western Siberia. Segerkrantz, V., [1984, p.408-411, fin] **41-1939**  
 Peat inception and climatic change in northern Quebec. Payette, S., [1984, p.173-179, eng] **41-2006**  
 Aerial survey of a salt marsh: ice rafting to the lower intertidal zone. Hardwick-Witman, M.N., [1986, p.379-383, eng] **41-2244**  
 Cryogenic deformations in reclaimed lands of the Khanka plain. Raiko, V.D., [1986, p.160-162, rus] **41-2251**  
 Primary succession in Arctic tundra on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.148-156, eng] **41-2341**  
 Petroleum engineering impact on northern swamps. Polkoshnikov, O.V., et al, [1982, p.198-209, eng] **41-2344**  
 Floristic findings in Penkigney Bay, Chukotskiy Peninsula. Sekretareva, N.A., [1986, p.677-683, rus] **41-2563**  
 Organic soils. Rubinshtein, A.I.A., [1986, 89p., rus] **41-2729**  
 Methane flux from northern peatlands. Harris, R.C., et al, [1985, p.652-654, eng] **41-2744**  
 Development of Holocene peat hummocks in northwestern Siberia. Vasil'chuk, I.U.K., et al, [1986, p.123-128, rus] **41-2828**  
 Cryogenic processes in the formation of swamp microrelief. Maksimova, L.N., et al, [1986, p.147-151, rus] **41-2833**  
 Construction of electric power lines for main pipelines. Manual. Aronopol, A.G., et al, [1986, 164p. (Pertinent p.127-138), rus] **41-2890**  
 Role of fires in taiga paludification. Liakhova, I.G., [1986, p.75-80, rus] **41-2899**  
 Blasting work in ground and rocks. Kucheriavt, F.I., ed, [1986, 128p., rus] **41-2903**  
 Peat excavation by blasting in channel construction. Frash, G.B., [1986, p.54-61, rus] **41-2905**  
 Main pipelines in areas of complicated engineering and geological conditions. Morozov, V.N., [1987, 123p., rus] **41-2962**  
 Construction of deep foundations. Giotov, N.M., et al, [1985, 248p., rus] **41-3125**  
 Evaluating the state of gas pipelines from space photographs. Aref'eva, E.M., et al, [1986, p.27-29, rus] **41-3212**  
 Combined use of vegetational resources in the north European USSR. Chertovskoi, V.G., [1985, p.26-31, rus] **41-3434**  
 Mechanized laying of communication cables under difficult conditions. Kuz'menko, V.V., et al, [1987, 161p., rus] **41-3609**  
 Development of swamps and paludal forests in western Siberia. Efremov, S.P., et al, [1986, p.26-29, rus] **41-3743**  
 Using spaceborne photography data in studying forests and swamps. Gorozhankina, S.M., [1986, p.169-189, rus] **41-3973**  
 Tractive power of walking all-terrain vehicles designed for swamps. Korovitsyn, L.F., et al, [1987, p.22-24, rus] **41-3984**  
 Hydromeliorative regionalization of West Siberia from space photographs. Gorozhankina, S.M., [1984, p.16-25, rus] **41-4087**  
 Sub-drainage systems in cryogenic peat soils. Loginov, I.I., et al, [1984, p.51-52, rus] **41-4089**  
 Calcium in the peat soils of northern Europe. Sin'kevich, E.I., [1986, p.72-84, rus] **41-4117**

- Diatomaceous algae in water bodies of the Kolyma Power Plant. Kharitonov, V.G., [1985, p.91-105, rus] **41-4121**

**Sweden**

- Research on engineering in arctic and subarctic regions, the Cold Region Technology Center of Luleå University. Lindmark, R., [1986, p.125-129, eng] **41-970**  
 Swedish offshore industry and some Arctic developments. Wassberg, R., [1986, p.41-56, eng] **41-1089**  
 Trace metals in the snow of northern Sweden. Ross, H.B., et al, [1986, p.27-43, eng] **41-1260**  
 Morphoclimatic aspects of periglacial features, northern Scandinavia. Svensson, H., [1986, p.123-130, eng] **41-1870**  
 Zonation and ecology of high mountain permafrost in Scandinavia. King, L., [1986, p.131-139, eng] **41-1871**  
 Pingos and palsas in northernmost Sweden. Lagerback, R., et al, [1986, p.149-154, eng] **41-1873**  
 Nivation and local glaciation in N. and S. Sweden. A progress report. Rapp, A., et al, [1986, p.197-205, eng] **41-1878**  
 Freeze thaw activity at snowpatch sites. Nyberg, R., [1986, p.207-211, eng] **41-1879**  
 —Abisko  
 Permafrost mounds in the Abisko area, northern Sweden. Akerman, H.J., et al, [1986, p.155-165, eng] **41-1874**  
 —Gullmaren Fjord  
 On the response of the fjord Gullmaren under ice cover. Djurfeldt, L., [1987, p.1557-1567, eng] **41-3345**  
 —Mikkaglaciären  
 Mikkaglaciären: bed topography and response to 20th century climate change. Holmlund, P., [1986, p.291-302, eng] **41-3561**  
 —Storglaciären  
 Water storage in Storglaciären, Kebnekaise, Sweden. Ostling, M., et al, [1986, p.279-290, eng] **41-3560**  
 Extrusion flow demonstrated by borehole deformation measurements over a riegel, Storglaciären, Sweden. Hooke, R.L., et al, [1987, p.72-78, eng] **41-3599**  
 Swelling  
 Cyclic swelling of clays. Osipov, V.I., et al, [1987, p.23-36, rus] **41-3399**  
 Switzerland  
 —Aletschgletscher  
 Ice avalanches and a landslide on Grosse Aletschgletscher. Alean, J., [1984, p.9-25, eng] **41-622**  
 —Alps  
 Snow and avalanches in the Swiss Alps, winter 1984-85. [1986, 172p., ger] **41-2290**  
 Snow and avalanche conditions in the Swiss Alps. Gliott, S., et al, [1986, p.45-106, ger] **41-2292**  
 Accidents and damage due to avalanches in the Swiss Alps. Etter, H.-J., [1986, p.107-161, ger] **41-2293**  
 Recent variations of glaciers in the Swiss Alps. Aellen, M., [1985, p.73-82, fre] **41-3176**  
 —Davos  
 Snow and avalanches in the Davos region. Föhn, P., et al, [1986, p.29-44, ger] **41-2291**  
 —Findelengletscher  
 Dye tracer experiments on the Findelengletscher, Switzerland. Moeri, T., et al, [1986, p.33-41, eng] **41-3524**  
 —Gornegletscher  
 Cationic denudation rate of an alpine glacial catchment. Metcalf, R.C., [1986, p.19-22, eng] **41-3523**  
 Symposia  
 See: Meetings  
 Synoptic meteorology  
 Synoptic-scale influences of snow cover and sea ice. Ross, B., et al, [1986, p.1795-1810, eng] **41-988**  
 Proceedings of the International Conference on Polar Lows, 1986. [1986, 364p., eng] **41-1795**  
 Role of local heat sources in synoptic activity within the Polar Basin. LeDrew, E.F., [1984, p.309-327, eng] **41-4534**  
 Systems analysis  
 Analysis and monitoring of avalanche glacioecosystems. Kanaev, L.A., [1986, p.43-53, rus] **41-104**  
 Characteristics of naded fields. Sokolov, B.L., [1986, p.138-147, rus] **41-123**  
 Calculated relations among indices of hydrophysical properties of frozen soils. Shefkin, I.V., [1986, p.151-156, rus] **41-2834**  
 Physical geocryology. Shvetsov, P.F., et al, [1986, 177p., rus] **41-2885**  
 Analysis and computation of regimes of major mountain glacier systems. Krenke, A.N., [1986, p.4-9, 125-130, rus] **41-4332**  
 Taiga  
 Structure and dynamics of forest landscapes in Karelia. Belousova, N.A., ed, [1985, 184p., rus] **41-189**  
 Types of landscapes in the Karelian ASSR. Volkov, A.D., et al, [1985, p.4-16, rus] **41-190**  
 Biocenotic structure of forests in different landscapes of central taiga. Volkov, A.D., et al, [1985, p.16-38, rus] **41-191**  
 Phytocenotic and ecologic peculiarities of forest types prevailing in different landscapes of central taiga. Shelekhov, A.M., et al, [1985, p.38-45, rus] **41-192**



- Pine forest successions in Karelian taiga. Gromtsev, A.N., [1985, p.46-61, rus] 41-193
- Improving the efficiency of geochemical exploration methods in taiga (8th Session of the Siberian branch of SGPM) summaries of reports. [1986, 240p., rus] 41-197
- Strategy of geochemical exploration in the taiga zone. Tauson, L.V., [1986, p.10-14, rus] 41-198
- Biogeochemical exploration for mineral deposits in forest lands and taiga. Kovalevskii, A.L., [1986, p.32-37, rus] 41-199
- Geochemical exploration in economically developing parts of taiga. Zagoekin, V.A., et al, [1986, p.145-148, rus] 41-200
- Geochemical exploration in the northern taiga permafrost areas. Makarov, V.N., [1986, p.158-159, rus] 41-201
- Biochemical indications of gold-ore deposits in permafrost. Ursova, O.A., [1986, p.226-227, rus] 41-202
- Economic and ecological effects of forestry in northern regions. Pokina, N.M., et al, [1985, p.33-38, rus] 41-207
- Studying soils and ground in the central BAM area. Vasilenko, N.G., et al, [1986, p.104-118, rus] 41-425
- Early results of the Rosie Creek Fire Research Project 1984. Juday, G.P., ed, [1985, 46p., eng] 41-570
- Studying hydrographic indices of rivers in the Irtysh area taiga. Trofimova, E.V., [1986, p.66-71, rus] 41-812
- Jamming of taiga rivers by fallen trees. Zemtsov, A.A., et al, [1986, p.101-107, rus] 41-813
- Dynamics and hydrophysical properties of forest litter in the Krasnoyarsk forest steppes. Stakanov, V.D., et al, [1986, p.172-176, rus] 41-816
- Identification of regional features of West Siberian swamps on space photographs. Gorozhankina, S.M., [1986, p.29-37, rus] 41-817
- Plants in the Anadyr' River basin. Korobkov, A.A., et al, [1986, p.450-459, rus] 41-989
- Estimating the productivity of northern taiga forests in Siberia. Mitrofanov, D.P., [1984, p.95-102, rus] 41-1082
- Studying cryogenic processes at research institutes. Ivanovskii, L.N., et al, [1986, p.136-149, rus] 41-1202
- Forestry in permafrost regions. Pozdniakov, L.K., [1986, 192p., rus] 41-1343
- Alpine phytocenotic systems of the Subarctic. Norin, B.N., ed, [1986, 292p., rus] 41-1344
- Hydrologic investigations of landscapes. Bachurin, G.V., ed, [1986, 208p., rus] 41-1365
- Swamp stability equations for taiga. Geleta, I.F., [1986, p.49-57, rus] 41-1366
- Natural water bodies as indicators of landscapes. Aseev, V.V., et al, [1986, p.75-80, rus] 41-1369
- Peculiarities of water balance structure in different landscapes of Priangarie. Berkin, N.S., et al, [1986, p.187-193, rus] 41-1375
- Interrelations between forest and swamp in western Siberia. Glebov, N.I., [1986, p.145-152, rus] 41-1405
- Forest fire spread rates estimated from infrared images. Valendik, E.N., et al, [1985, p.717-788, eng] 41-1444
- Salt transfer processes in cryogenic soils. Panin, P.S., et al, [1986, p.245-250, rus] 41-1745
- Modular construction of oil and gas industry objects. Manual. Batalin, I.U.P., ed, [1986, 576p., rus] 41-1746
- Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., [1986, p.49-67, rus] 41-1822
- Forest ecosystems in the Alaskan taiga. Van Cleave, K., ed, [1986, 230p., eng] 41-1898
- Variability of hydrological characteristics in western Siberia. Nikitin, S.P., et al, [1986, 204p., rus] 41-1969
- Water resources of the BAM zone. Sokolov, A.A., [1986, 166p. (pertinent p.146-151), rus] 41-2228
- Radiation regime of southern Tyumen' forests. Abdullaev, A.A., [1986, p.52-56, rus] 41-2249
- Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al, [1986, p.72-80, rus] 41-2250
- Development of taiga forests. Savina, L.N., [1986, 189p., rus] 41-2258
- Fir trees. Krylov, G.V., et al, [1986, 238p., rus] 41-2259
- Lichen pine forests. Listov, A.A., [1986, 181p., rus] 41-2288
- Kologriv forest (ecological investigations). Sokolov, V.E., ed, [1986, 126p., rus] 41-2345
- Structure of the basic spruce forest in southern taiga. Dylis, N.V., et al, [1986, p.6-22, rus] 41-2346
- Structure of the radiation and heat balance in Kologriv forest. Rudnev, N.I., [1986, p.72-87, rus] 41-2348
- Dynamics of plant communities following the felling of forest. Ziabchenko, S.S., [1986, p.5-22, rus] 41-2374
- Soil restoration in felled areas of bilberry pine forests. Voronova, T.G., [1986, p.22-31, rus] 41-2375
- Clear-felling impact on properties of sandy podzols in northern Karelia. Lazareva, I.P., et al, [1986, p.61-79, rus] 41-2376
- Changes in soil microflora induced by lumbering equipment in clear-cut areas. Zagural'skaya, L.M., [1986, p.79-91, rus] 41-2377
- Decomposition of wood litter on felled areas of the North. Kozlovskaya, L.S., et al, [1986, p.92-107, rus] 41-2378
- Impact of wheeled vehicles on trees and soil cover during forest thinning in Karelia. D'akonov, V.V., et al, [1986, p.137-146, rus] 41-2379
- Impact of ejecta from coal-fueled power plants on paludal north-taiga pine forests. Alekseev, V.A., et al, [1986, p.664-672, rus] 41-2562
- Snow water reserves in taiga zone. Rubtsov, M.V., et al, [1986, p.11-16, rus] 41-2598
- Studies of horizontal composition of marginal vegetation in the Salair taiga. Kirikova, L.A., et al, [1986, p.22-28, rus] 41-2600
- Mechanisms of birch adaptation to conditions of the North. Ermakov, V.I., [1986, 144p., rus] 41-2751
- Development of Holocene peat hummocks in northwestern Siberia. Vasil'chuk, I.U.K., et al, [1986, p.123-128, rus] 41-2828
- Scientific basis for utilization and reproduction of taiga forests in the central Ural Mountains (The Bilimbaev experimental forest taken as an example). Zubareva, R.S., ed, [1986, 158p., rus] 41-2873
- Characteristics of forest resources and their use in the Bilimbaev experimental and model forest. Smolonogov, E.P., et al, [1986, p.3-15, rus] 41-2874
- Soil cover of the Bilimbaev model forest. Firsova, V.P., et al, [1986, p.45-72, rus] 41-2875
- Gradual and selective cutting methods in the Bilimbaev taiga. Daniluk, V.N., et al, [1986, p.89-97, rus] 41-2877
- Artificial reforestation in the Bilimbaev taiga. Makarov, V.A., [1986, p.98-109, rus] 41-2878
- Interrelationships among components of biogeocenoses in southern taiga. Smirnov, A.V., ed, [1986, 120p., rus] 41-2898
- Role of fires in taiga paludification. Liakhova, I.G., [1986, p.75-80, rus] 41-2899
- Moisture deficiency in some trees during fall-winter seasons. Nevskii, L.M., [1986, p.97-100, rus] 41-2900
- Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al, [1986, 112p., rus] 41-2902
- Exploration and economic evaluation of petroleum deposits in subarctic regions. D'achkova, E.A., [1987, 108p., rus] 41-2961
- Ground water regime and runoff in Siberian taiga. Konstantinov, V.D., [1986, p.14-22, rus] 41-3209
- Hydrothermal regime of taiga and tundra soils of northeastern Europe. Kononenko, A.V., [1986, 145p. + inserts, rus] 41-3246
- Combined use of vegetational resources in the north European USSR. Chertovskoi, V.G., [1985, p.26-31, rus] 41-3434
- Scientific-technological progress and the development of northern natural resources. Chistobaev, A.I., et al, [1985, p.42-51, rus] 41-3435
- Rational use and preservation of ecosystems in the North. Pliavchenko, N.I., [1985, p.68-75, rus] 41-3437
- Development of swamps and paludal forests in western Siberia. Efremov, S.P., et al, [1986, p.26-29, rus] 41-3743
- Forest-tundra and north taiga forests of the Far East. Raevskikh, V.M., et al, [1986, p.18-20, rus] 41-3744
- Natural associations of the Arctic and their protection. Korotkevich, E.S., ed, [1986, 120p., rus] 41-3860
- Protected territories of the North. Uspenskii, S.M., et al, [1986, p.18-24, rus] 41-3862
- Hydrologic studies in mountain forests of the U.S.S.R. Gan, P.A., ed, [1985, 172p., rus] 41-3872
- Snow accumulation in the Khamar-Daban forests. Onuchin, A.A., [1985, p.109-119, rus] 41-3873
- Remote sensing techniques used in solving geobotanical problems. Sharapov, V.N., ed, [1986, 191p., rus] 41-3970
- Remote sensing techniques of studying taiga after forest fires. Furiaev, V.V., [1986, p.147-159, rus] 41-3971
- Using spaceborne photography data in studying forests and swamps. Gorozhankina, S.M., [1986, p.169-189, rus] 41-3973
- Landscape conditions, hydrology and hydrochemistry of lakes in Central Priob'e. Tiul'kova, L.A., [1986, p.64-66, rus] 41-3977
- Land reclamation in Siberia (Scientific basis for preservation and use of land resources in Siberia). Panin, P.S., ed, [1984, 193p., rus] 41-4086
- Soil climate in southeastern West Siberia. Az'muka, T.I., et al, [1984, p.26-31, rus] 41-4088
- Biologic activities in deeply freezing taiga soils. Popova, E.P., [1985, p.47-54, rus] 41-4111
- Micromorphological characteristics of humus profile in loamy taiga soils. Rusanova, G.V., [1986, p.69-77, rus] 41-4564
- Humus profiles in the paludified loamy podzols of taiga. Viituri, G.M., [1986, p.78-88, rus] 41-4565
- Environmental impact of industrial undertakings. Krivolutski, D.A., ed, [1987, 320p., rus] 41-4567
- Bioindications of natural environments in the North. Kriuchkov, V.V., [1987, p.60-67, rus] 41-4568
- Pollution impact on the environmental functions of northern taiga. Chertovskoi, V.G., [1987, p.67-72, rus] 41-4569
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernen'kova, T.V., [1987, p.147-157, rus] 41-4571
- Studies of migration frost mounds with the use of multiband aerial photographs. Gromova, E.I., [1983, p.142-150, rus] 41-4612
- Tailings**
- Biologic recultivation of industrial tailings in the Far North. Pervezhev, V.N., et al, [1986, 104p., rus] 41-2752
- Rational utilization and preservation of ground water in the Buryat ASSR. Rezanov, I.N., ed, [1986, 114p., rus] 41-3330
- Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR. Adushinov, A.A., [1986, p.52-59, rus] 41-3331
- Cryogenic processes and the stability of tailing-dumps built on permafrost bases. Kuznetsov, G.I., [1986, p.67-75, rus] 41-3448
- Frozen tailings pond dams. LaFlèche, P.T., et al, [1987, p.191-197, eng] 41-4012
- Taliks**
- Origin of some buried ice forms in the Yamal tundra. Krass, M.S., et al, [1986, p.66-75, rus] 41-1793
- Origin and stratigraphic position of thick ground-ice layers in the Ledyanaya Gora outcrop. Karpov, E.G., [1986, p.73-78, rus] 41-1907
- Compiling maps for evaluating potential thermokarst sagging. Garagulia, L.S., et al, [1986, p.77-95, rus] 41-2087
- Interactions between artificial lakes and permafrost. Afanasenko, V.E., et al, [1986, p.120-127, rus] 41-2092
- Vertical electrical soundings in the vicinity of extended taliks. Botkov, S.A., et al, [1986, p.172-180, rus] 41-2098
- Criteria indicating the presence of taliks in permafrost. Petrova, R.G., [1986, p.49-53, rus] 41-2536
- Cryogenic structure of sedimentary mantle in central Yakutian lowlands. Gravis, G.F., et al, [1986, p.60-65, rus] 41-2820
- Glaciers, subglacial taliks and perennially frozen rocks. Romanovskii, N.N., et al, [1986, p.206-219, rus] 41-2842
- Controlling filtration regimes of taliks beneath rivers by using pneumatic screens. Vasil'eva, I.A., et al, [1986, p.114-119, rus] 41-3454
- Map of distribution and discontinuity of permafrost in western Siberia. Fotiev, S.M., [1986, p.38-52, rus] 41-3485
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, [1987, p.4-65, rus] 41-3650
- Subsurface ice-lens formation by the refreezing of taliks. Gravis, G.F., et al, [1972, p.73-79, rus] 41-3748
- Water supply and sewage disposal in the Yamal Peninsula. Kataev, V.V., et al, [1987, p.8-9, rus] 41-3935
- Talus**
- Slopes and talus of NW Greenland. Malaurie, J., [1985, p.63-79, fre] 41-374
- Alpine debris fans in the Canadian Rocky Mountains. Sauchyn, D.J., [1986, p.191-217, eng] 41-1255
- Vascular plants of mountain talus slopes, Mt. Rae area, Alberta, Canada. Kershaw, L.J., et al, [1986, p.218-230, eng] 41-1256
- Experimental frost shattering of some precambrian rocks, Finland. Lautridou, J.P., et al, [1986, p.89-100, eng] 41-1847
- Protalus rampart related to alpine flows in Japanese Alps. Ono, Y., et al, [1986, p.213-223, eng] 41-1880
- Rock glaciers. Gorbunov, A.P., et al, [1986, p.73-77, rus] 41-2535
- Tanker ships**
- Architectural and structural type of the 1986-1995 models of refueling-tankers. Morelinis, F.A., et al, [1984, p.19-29, rus] 41-541
- Icebreaking tanker transit simulation model. Kämäräinen, J., [1986, p.1138-1159, eng] 41-1150
- Unloading of a large tanker near Mirny Station. Kozlovskii, A.M., et al, [1986, p.116-119, rus] 41-1267
- Nestship vessels feel at home in ice conditions. [1985, p.120-121, rus] 41-1524
- SS ACV icebreaking LNG/oil tanker for year round Arctic transportation. Murthy, T.K.S., [1986, p.563-576, eng] 41-1619
- Winter navigation of icebreaking Lunn-class tankers in the Baltic Sea. Tornblom, A., [1986, p.710-725, eng] 41-2053
- Big HSVA-ice-tank two years in service now. Schwarz, J., et al, [1986, p.1487-1491, ger] 41-2194
- Experimental study of maneuverability of icebreakers and ships in sea ice. Ionov, B.P., et al, [1986, p.276-297, eng] 41-2279
- Icebreaking tanker moored to an offshore structure. Machemehl, J.L., [1987, p.329-339, eng] 41-2440
- Marine transportation of liquefied gases. Kozyrev, V.K., [1986, 206p., rus] 41-2872

**Tanker ships (cont.)**

- Shipping in the Arctic, autumn 1983. [1984, p.32-35, eng] 41-2937
- Ship operations, 1984-1985. Marthaler, J.G., [1985, p.267-269, eng] 41-3328
- Ice loads on the propulsion machinery of a tanker ship. Koskikivi, J., et al, [1985, 71p. + appenda., eng] 41-4598

**Tanks (combat vehicles)**

- After-action report—Reforger '85. Liston, R.A., [1986, 20p., eng] 41-3816

**Tanks (containers)**

- Unique frost thawers. Hale, D., [1986, p.31-32, eng] 41-175
- Effects of ice action under conditions of the lower connections of spherical liquefied-gas tanks. Pavel, A., [1986, p.628-630, rum] 41-3069
- Destruction of concrete water tanks in a severe climate due to ice lensing. Rogers, C., et al, [1987, p.723-739, eng] 41-3703
- Low-temperature service facilities and recent status of their materials and welding. Saiga, Y., et al, [1986, p.1-21, eng] 41-3785
- See also: Storage tanks

**Tectonics**

- Seas of the Soviet Arctic. Vol.9. Gramberg, I.S., ed, [1984, 280p., rus] 41-571
- The living Earth. Agriculture and natural resources. Ushakov, S.A., ed, [1986, 137p., rus] 41-1163
- Model of stresses in the Antarctic lithosphere induced by ice loads. Shemenda, A.I., et al, [1986, p.97-102, rus] 41-1166
- Tectonics of Valhalla basin on Callisto. Thomas, P.G., et al, [1985, p.781-790, eng] 41-1738
- Influence of neotectonics on the development of cryogenic formations. Sukhov, A.G., et al, [1986, p.103-115, rus] 41-2826
- Long-range frost heave manifestations in NW Siberia. Kuznetsova, I.L., [1986, p.116-123, rus] 41-2827
- Allowing for the most recent tectonics in geocryological mapping of western Siberia. Belopukhova, E.B., et al, [1986, p.67-78, rus] 41-3487
- Antarctic ice and rocks. Doake, C.S.M., [1987, p.138-189, eng] 41-3532

**Telecommunication**

- Systems and means of oceanic radio-communication. Panin, I.U.I., ed, [1984, 144p., rus] 41-557
- Guidance systems for ships operating in ice. Likhachev, A.V., [1984, p.36-42, rus] 41-558
- Non-Gaussian noise as the background interference in telecommunication. Nuttall, A.H., et al, [1986, 161p., eng] 41-2072
- Driving commander's vehicle in snow fields. Gnidyat, A., [1986, p.76-78, rus] 41-3931
- Subzero engineering. Hills, A., [1986, p.52-56, eng] 41-4273

**See also: Data transmission****Telemetering equipment**

- Japanese activities on automatic weather observations. Fujii, Y., [1986, p.19-20, eng] 41-1075
- Use of AWS on Bouvet Island. Vinje, T., [1986, p.21-22, eng] 41-1076
- ANARE automatic weather station program. Allison, I., [1986, p.25-30, eng] 41-1077
- See also: Remote sensing

**Temperature**

- See also: Air temperature; Frozen ground temperature; Frozen rock temperature; Ice temperature; Low temperature research; Low temperature tests; Snow surface temperature; Snow temperature; Soil temperature; Surface temperature; Thermal properties; Water temperature

**Temperature distribution**

- Progress in pedology. Contributions of Soviet pedologists to the 13th International Congress of Pedologists, Hamburg, 1986. Kovda, V.A., ed, [1986, 270p., rus] 41-1743
- Thermal characteristics of concrete structures during curing processes. Wu, C.Z., et al, [1987, p.113-118, eng] 41-2411
- Spatial variability of soil temperature. Davidoff, B., et al, [1986, p.1122-1127, eng] 41-2475
- Temperature distribution in composite bridges. Kennedy, J.B., et al, [1987, p.475-482, eng] 41-2485
- Non-steady-state heat exchange of linear underground constructions with a thawing (freezing) soil. Gokhman, M.R., [1987, p.781-785, eng] 41-3241

**Temperature effects**

- Effects of liquid water content in clouds on ice crystal production. Foster, T., et al, [1982, p.123-126, eng] 41-12
- Fiber optics in adverse environments. Lyons, P.B., ed, [1981, 276p., eng] 41-579
- Survivability of Army fiber optics systems. Wichansky, H., et al, [1981, p.110-117, eng] 41-583
- Surface temperature effect on ice splinter production. Griggs, D.J., et al, [1986, p.1254-1256, eng] 41-1478
- Binding modes of water in plant leaves: a dielectric study. Pissin, P., et al, [1987, p.119-125, eng] 41-2223
- Ice as capacitor dielectric. Shimizu, N., et al, [1985, p.539-542, eng] 41-3349

- Wind-chill indices—a review. Dixon, J.C., et al, [1987, p.1-17, eng] 41-3576
- Melting of ice layer by effect of temperature and aqua-solvent. Sugawara, M., et al, [1987, p.227-232, eng] 41-3963

**See also: Thermal effects****Temperature gradients**

- Structure of quick hardened snow under temperature gradient. Akitaya, E., [1986, p.11-18, jpn] 41-3875

**Temperature measurement**

- Comparative specification of engineering thermometers for low temperatures. Tian, L.S., et al, [1986, p.259-262, eng] 41-1407
- Characteristics of Arctic polar stratospheric clouds. Kent, G.S., et al, [1986, p.2149-2161, eng] 41-2550
- Calculating mean temperature of concrete during the cooling of structures. Golovnev, S.G., et al, [1986, p.126-130, rus] 41-2759
- Aerosol transport processes in the Antarctic. Hogan, A.W., et al, [1985, p.205-206, eng] 41-3324
- Liquid water mass fraction of snow measured by alcohol solution. Fisk, D.J., [1986, p.538-541, eng] 41-4311
- See also: Geothermometry

**Temperature regime****See: Thermal regime****Temperature variations**

- Recent changes in the glaciers of Heard Island. Allison, I.F., et al, [1986, p.255-271, eng] 41-1020
- Impact of present century climate fluctuations in the Northern Hemisphere. Wallén, C.C., [1986, p.245-278, eng] 41-3559

**Tensile properties**

- Steel plates for arctic offshore structures. Okano, S., et al, [1986, p.119-126, eng] 41-357
- Microstructure and the resistance of rock to tensile fracture. Peck, L., et al, [1985, p.11,533-11,546, eng] 41-496

- Development of composite members for Arctic offshore structures. Shioya, T., et al, [1986, p.660-677, eng] 41-1123

- Tensile strength of ice with preexisting cracks. Hoxie, S., [1986, 7p., eng] 41-2132

- Development of a method to evaluate the low temperature tensile properties of asphalt concrete. Anderson, K.O., et al, [1986, p.156-189, eng] 41-2204

- Tensile fracture model for ice. Sunder, S.S., et al, [1987, p.225-233, eng] 41-2425

- Effect of sub-surface irregularities on the strength of multi-year ice. Hallam, S.D., et al, [1987, p.225-238, eng] 41-2426

- Determination of mechanical properties of ice by quantum statistical approach and experiments. Schwarz, J., et al, [1987, p.245-252, eng] 41-2428

- Tensile properties of asphalt concrete at freezing temperature. Anderson, K.O., et al, [1987, p.333-366, eng] 41-4028

- Exposure tests at Treat Island. Smith, R.J., [1987, p.48-53, eng] 41-4175

**Terminology**

- International symbols for marine ice maps and nomenclature of marine ice. [1986, 45p., rus] 41-1896
- Physical geocryology. Shvetsov, P.F., et al, [1986, 177p., rus] 41-2885
- Rational use and preservation of ecosystems in the North. Pivachenko, N.I., [1985, p.68-75, rus] 41-3437
- Definition of fossil periglacial zones and periglacial phenomena. Brochu, M., [1986, p.27-30, fre] 41-3578

**Terrain identification****See: Geobotanical interpretation****Test chambers****See: Cloud chambers; Cold chambers****Test equipment**

- Non-destructive control method for studying thixotropic changes in clayey grounds. Voznesenskii, E.A., et al, [1987, p.80-94, rus] 41-3400
- Discussion of "Repeated load triaxial testing of frozen and thawed soils". Yousefi, H., [1986, p.221-225, eng] 41-3782

**Tests**

- Testing the experimental assembly for manufacturing artificial snow on dredge proving-grounds. Petrenko, N.R., [1986, p.78-80, rus] 41-2157
- Law observed in the generation of sound in ice samples subjected to loading. Mitiaev, P.V., et al, [1986, p.168-169, rus] 41-3240
- See also: Cold weather tests; Environmental tests; Freeze thaw tests; Hardness tests; High pressure tests; Impact tests; Low temperature tests; Mechanical tests; Penetration tests; Pile load tests; Strain tests; Triaxial tests; Ultrasonic tests

**Textures****See: Cryogenic textures****Thaw consolidation**

- Exact solution for melting of frozen soil with thaw consolidation. Lunardini, V.J., [1987, p.97-102, eng] 41-2408

**Thaw depth**

- State of permafrost mined by the express method. Umantsev, R.F., [1985, p.52-54, rus] 41-1018

**Thaw weakening**

- Deformation of pavements during freeze thaw cycles. Johnson, T.C., et al, [1986, 138p., eng] 41-2549
- Life cycle costing of paved Alaskan highways. Volume 1. Kulkarni, R., et al, [1982, 76p., eng] 41-4069
- Remote frost depth monitoring. Connor, B., [1984, 13p., eng] 41-4075
- Buried Arctic pipelines subjected to thaw settlement. Workman, G.H., [1987, p.131-138, eng] 41-4634

**Thawing****See: Artificial thawing; Ground thawing; Melting****Thawing rate**

- Exact solution for melting of frozen soil with thaw consolidation. Lunardini, V.J., [1987, p.97-102, eng] 41-2408
- Determining the state of stress in shaft timbering during thawing. Abashin, S.I., et al, [1986, p.28-29, rus] 41-3769

**Theories**

- Geocryology—its subject and problems. Danilov, I.D., [1986, p.18-26, rus] 41-2082
- Physical geocryology. Shvetsov, P.F., et al, [1986, 177p., rus] 41-2885
- See also: Ice age theory

**Thermal balance****See: Glacier heat balance; Heat balance****Thermal conductivity**

- Physical oceanography near the North Pole. Pounder, E.R., [1986, p.11,763-11,773, eng] 41-1025
- Effect of brine on sea ice heat conductivity. Nazintsev, I.U.L., [1986, p.107-115, rus] 41-1266
- Thermal resistance measurements of a well-insulated wall. Zarr, R.R., et al, [1986, p.957-973, eng] 41-1389
- Design for an insulated foundation of culvert and sluice. Yu, B., et al, [1986, p.261-266, chi] 41-1427
- Survival of the meadow vole in a snow cover. Kalliomaki, N.M., et al, [1984, p.153-164, eng] 41-1957
- Composites for cryogenic dewars and instruments. Morris, E.E., [1982, p.95-109, eng] 41-1990
- Heat transfer characteristics of a latent heat storage unit. Sasaguchi, K., et al, [1986, p.2978-2992, eng] 41-2110

- Guest molecule size effect on behavior of clathrate hydrates. Anderson, P., et al, [1983, p.1423-1432, eng] 41-2246

**Field measurements of soil thermal conductivity.**

- Goodrich, L.E., [1986, p.51-59, eng] 41-2323
- Performance of a closed tube thermosyphon. Lock, G.S.H., et al, [1987, p.69-77, eng] 41-2404
- Multi-dimensional solutions for melting or freezing around a buried tube. Zhang, G.-P., [1986, 167p., eng] 41-2588

- Thermal properties of soils. Farouki, O.T., [1986, 136p., eng] 41-2973

- Determining heat conductivity coefficients of coarse grained materials used in embankment construction. Gorokhov, E.N., [1985, p.105-110, rus] 41-3130

- Influence of moisture on heat transfer in structures. Kohonen, R., [1987, 56p., fin] 41-3843

- Pavement structure subjected to low temperature. Selvadurai, A.P.S., et al, [1987, p.277-301, eng] 41-4026

- In-situ thermal conductivity measurements. Atkins, R.T., [1983, 38p., eng] 41-4070

- Experience in studying thermal properties of ground. Zaitsev, V.S., [1986, p.115-118, rus] 41-4466

- Modelling ice accretion on non-rotating cylinders. Szilder, K., et al, [1987, p.177-191, eng] 41-4494

**Thermal diffusion**

- New horizontal gradient, continuous flow, ice thermal diffusion chamber. Tomlinson, E.M., et al, [1985, p.448-467, eng] 41-3216

**Thermal drills**

- Technical means for thermal drilling and cutting of ice. Morev, V.A., et al, [1986, p.37-39, rus] 41-2151
- Ice destruction. Methods and technology. Bogorodakii, V.V., et al, [1986, 214p., eng] 41-2564
- Thermophysics of glaciers. Zotikov, I.A., [1986, 275p., eng] 41-2565

- Portable hot water ice drill. Tucker, W.B., et al, [1986, p.549-564, eng] 41-2676

- Thermal hole opener. Hansen, D.P., [1986, p.565-574, eng] 41-2677

- Rock failure under thermo-cyclic loads. Moskalev, A.N., et al, [1987, 248p., rus] 41-4152

- Thermal ice drill for profiling thick multiyear ice. Poplin, J.P., et al, [1987, p.1-11, eng] 41-4211

- Thermal hole opener. Hansen, D.P., [1987, p.51-56, eng] 41-4215

- Portable hot-water ice drill. Tucker, W.B., et al, [1987, p.57-64, eng] 41-4216

- Using fire-jet drills in permafrost. Sherstiuk, B.F., et al, [1986, p.8-10, rus] 41-4615

- Steam vibro-leading machines for drilling in permafrost. Gokhman, M.R., et al, [1986, p.20-23, rus] 41-4616

**Thermal effects**

- Thermal deformation of loaded concrete. Planas, J., et al, [1984, p.639-644, eng] 41-2003

- Shear heating instabilities of large ice sheets. Yuen, D.A., et al, [1985, p.74-75, eng] 41-2634

- Thermal erosion in the Baykal Amur railroad zone. An, V.V., et al, [1984, p.35-39, rus] 41-4356  
 See also: Temperature effects
- Thermal expansion**  
 Thermal expansion of asphalt pavement. Osterkamp, T.E., et al, [1986, p.299-301, eng] 41-1298
- Thermal imagery**  
 See: Infrared photography
- Thermal insulation**  
 Plastic foam—from frost protection to road embankments. Refsdal, G., [1985, p.16-19, eng] 41-335  
 House for a cold city. Ross, J.F., [1985, p.20-24, eng] 41-336  
 Scientific and technical progress in road construction. Altmatov, I.T., ed, [1984, 188p., rus] 41-785  
 Influence of thermoinsulative layers on temperature regime of road pavements. Duisenaliyev, M., [1984, p.140-145, rus] 41-786  
 Field measurements of ice growth suppression by surface insulation. Christensen, F.T., [1986, p.436-446, eng] 41-1111  
 Thermal performance of the exterior envelopes of buildings. Proceedings. [1986, 1422p., eng] 41-1376  
 In-situ assessment of two retrofit insulations. Flanders, S.N., [1986, p.32-44, eng] 41-1377  
 Energy measurements and building parameters. Lyberg, M.D., et al, [1986, p.45-52, eng] 41-1378  
 Dynamic thermal performance of insulated metal deck roof systems. Courville, G.E., et al, [1986, p.53-63, eng] 41-1379  
 Heat loss factors for insulated building foundations. Zarling, J.P., et al, [1986, p.465-483, eng] 41-1383  
 Thermal performance of rigid cellular foam insulation at subfreezing temperatures. Aldrich, D.F., et al, [1986, p.500-509, eng] 41-1384  
 Thermal resistance measurements of a well-insulated wall. Zarr, R.R., et al, [1986, p.957-973, eng] 41-1389  
 Protected membrane flat roofs. Christensen, G., [1986, p.974-984, eng] 41-1390  
 Improved thermal insulation in windows by laminar airflows. Tjelflaa, P.O., et al, [1986, p.992-1003, eng] 41-1391  
 Decision model for the design of building envelopes. Murthy, N.S., [1986, p.1379-1392, eng] 41-1393  
 Design for an insulated foundation of culvert and sluice. Yu, B., et al, [1986, p.261-266, chi] 41-1427  
 Development of prefabricated metal buildings for cold environment. Sakai, M., et al, [1985, p.20-29, eng] 41-1572  
 Polystyrene foam used in construction of road and airport pavements. Ivanov, V.N., [1986, p.14-16, rus] 41-1882  
 Lightweight heater tape for shuttle propellant tank. Spencer, D.J., et al, [1986, 51p., eng] 41-2070  
 Scientific basis for the processes of upbuilding frozen water-ice foams on ground and their practical application. Levinskii, B.V., et al, [1986, p.66-72, rus] 41-2155  
 Determining optimal parameters of thermal protection for dredging grounds. Rashkin, A.V., et al, [1986, p.214-217, rus] 41-2181  
 Natural and forced convection in mineral fibre wall insulation. Korhonen, R., et al, [1986, 119p., fin] 41-2522  
 Increasing the thermoinsulative properties of lightweight concrete panels. Natsievskii, I.U.D., [1986, 88p., rus] 41-2647  
 Thermally insulated pipes for construction of industrial overground engineering nets. Rubiev, V.A., et al, [1986, p.28-29, rus] 41-2781  
 Efficiency of using foam plastics as hydro-thermoinulative materials for electrical heating plants. Valgin, V.D., et al, [1986, p.17-18, rus] 41-2795  
 Ductless method of laying pipes with phenol-poroplast insulation. Nesterov, V.I., et al, [1986, p.18-20, rus] 41-2796  
 Improving thermal insulation of building walls. Mordukhovich, I.M., et al, [1986, p.53-60, rus] 41-2920  
 Transient heat transfer in porous thermal insulations. Tong, T.W., et al, [1986, p.703-708, eng] 41-3290  
 Thermal protection for the Waterloo Dam, northern Saskatchewan. Noonan, D.K.J., et al, [1982, p.437-449, eng] 41-3751  
 Method of laying pipelines at low temperatures. Karpov, S.V., [1987, p.12-13, rus] 41-3810  
 Influence of moisture on heat transfer in structures. Korhonen, R., [1987, 56p., fin] 41-3843  
 Measuring building R-values with thermography and heat flux sensors. Flanders, S.N., [1987, 29p., eng] 41-4083  
 Rigid surfaces for roads and airports. Glushkov, G.I., et al, [1987, 255p., rus] 41-4151  
 Formation and development of the Kola Mining Complex. Peshev, N.G., ed, [1986, 123p., rus] 41-4556  
 Efficiency of producing and using lightweight concretes for construction in the Murmansk region. Nesterov, V.V., et al, [1986, p.62-67, rus] 41-4557
- Thermal measurements**  
 See: Temperature measurement
- Thermal processes**  
 See: Hydrothermal processes
- Thermal properties**  
 Thermophysical properties data on graphite/polyimide composite materials. Campbell, M.D., et al, [1982, p.54-72, eng] 41-1988  
 Roof blisters. Physical fitness building, Fort Lee, Virginia. Korhonen, C., et al, [1986, 15p., eng] 41-2611  
 Ground freezing '85—a summary. Baker, T.H.W., et al, [1987, p.301-306, eng] 41-3039  
 See also: Ice thermal properties; Permafrost thermal properties; Snow thermal properties
- Thermal radiation**  
 Computation of ice cover thermal emission. Brekhovskikh, V.L., [1985, p.574-581, eng] 41-822  
 Radiation measurements of snowy season in 1986 at Sapporo. Ishikawa, N., et al, [1986, p.17-23, jpn] 41-3503
- Thermal regime**  
 Control of thermal regime during mine excavation in permafrost. Manicheva, O.M., [1985, p.144-146, rus] 41-196  
 Arctic thermal design. Lunardini, V.J., [1985, p.70-75, eng] 41-1327  
 Energy measurements and building parameters. Lyberg, M.D., et al, [1986, p.45-52, eng] 41-1378  
 Dynamic thermal performance of walls. Fazio, P., et al, [1986, p.255-271, eng] 41-1380  
 Overall building enclosure evaluation in cold climates. Mill, P.A.D., et al, [1986, p.510-524, eng] 41-1385  
 Instrument for measuring building-envelope thermal resistance. Janssen, J.E., et al, [1986, p.723-738, eng] 41-1386  
 Convective loop heat losses in buildings. Harrie, D.T., et al, [1986, p.751-760, eng] 41-1388  
 Optimal building shape: a general design tool. Turner, R.H., [1986, p.1366-1378, eng] 41-1392  
 Types and characteristics of modern periglacial along the Qinghai-Xizang Highway. Wang, S., [1986, p.149-158, chi] 41-1462  
 Constitutional supercooling in natural ice. Jones, R.E., [1985, p.188-196, eng] 41-1494  
 Effects of heat withdrawal on ice covered lakes. Bengtsson, L., [1982, p.3-16, swe] 41-2854  
 Hydrothermal regime of soils in pine forests of Karelia. Erukov, G.V., et al, [1986, 112p., rus] 41-2902  
 Sensitivity of the arctic environment. French, H.M., [1987, p.154-163, eng] 41-3237  
 Methods of acting on the state of stress of massive concrete hydraulic structures. Starkun, L.M., et al, [1987, 111p., rus] 41-4123  
 Practical suggestions for calculating soil temperature regime (current awareness material). Fel'dman, G.M., [1985, 69p., rus] 41-4611
- Thermal stresses**  
 Model for rock fracture during freezing at Si... Hall, K., [1986, p.53-60, eng] 41-1987  
 Composites for extreme environments. [1982, eng] 41-1987  
 Temperature distribution in composite bridges. Kennedy, J.B., et al, [1987, p.475-482, eng] 41-2485  
 Thermal regime and stresses in concrete dams in permafrost areas. Epifanov, A.P., et al, [1987, p.35-37, rus] 41-3268  
 Low temperature cracking susceptibility of asphalt concrete. Janoo, V.C., et al, [1987, p.397-415, eng] 41-4030  
 Crack growth through asphalt overlays due to thermal stresses. Joseph, P., et al, [1987, p.453-491, eng] 41-4032  
 Investigation of repairation for thermal cracking in asphalt pavements. Kubo, H., et al, [1987, p.493-510, eng] 41-4033
- Thermodynamic properties**  
 Physics, chemistry and mechanics of frozen rocks. Ershov, E.D., [1986, 333p., rus] 41-3249  
 Thermodynamic model of first year sea ice. Gabison, R., [1987, p.105-119, eng] 41-3603
- Thermodynamics**  
 Thermodynamic theories of freezing and melting potentials. Rastogi, R.P., et al, [1986, p.179-185, eng] 41-530  
 Thermodynamics of electrolyte solutions. Beyer, R.P., et al, [1986, p.749-764, eng] 41-1553  
 Thermodynamics of a solid body subjected to external loads. Beghi, M., et al, [1987, p.26-32, eng] 41-2066  
 Modification of polar ice forecast subsystem—Arctic. Harr, P.A., et al, [1981, 202p., eng] 41-2191  
 Microstructure and thermodynamics of sea ice. Brown, R.L., [1987, p.209-213, eng] 41-2423  
 Ice dynamics. Hibler, W.D., III, [1986, p.577-640, eng] 41-2995  
 Dynamics and thermodynamics of the ice-ocean system in the ice edge zone, Greenland Sea. McPhee, M.G., et al, [1987, p.7017-7031, eng] 41-4257
- Thermokarst**  
 Geologic conditions of the burial of Pleistocene glacier ice in the Yenisey River area. Astakhov, V.I., [1986, p.72-78, rus] 41-108
- Hydrochemical regime of lake and suprapermafrost ground water in alasy. Shishkina, N.P., [1985, p.110-130, rus] 41-258  
 Development of cryogenic processes in the central Transbaikai. Shesternev, D.M., et al, [1985, p.74-76, rus] 41-311  
 Shore processes in the coastal zone of western Yamal. Smirnov, V.M., [1986, p.425-428, rus] 41-887  
 Methods of geomorphological field experiments in the USSR. Dedkov, A.P., ed, [1986, 160p., rus] 41-1197  
 Methods of studying cryogenic relief-forming processes at research stations. Zhigarev, L.A., et al, [1986, p.111-119, rus] 41-1199  
 Studying cryogenic processes at research institutes. Ivanovskii, L.N., et al, [1986, p.136-149, rus] 41-1202  
 Forestry in permafrost regions. Pozdniakov, L.K., [1986, 192p., rus] 41-1343  
 All-Union Conference on ground water flooding of built-up areas (forecasting and countermeasures), 3rd, Novosibirsk, 1984. Proceedings. [1985, 126p., rus] 41-1362  
 Ground water level rise in Siberia and the Far North and East. Gospodinov, D.G., [1985, p.27-33, rus] 41-1363  
 Hydrologic investigations of landscapes. Bachurin, G.V., ed, [1986, 208p., rus] 41-1365  
 Natural water bodies as indicators of landscapes. Aseev, V.V., et al, [1986, p.75-80, rus] 41-1369  
 Alasy as indicators of soil moisture. ...ikov, N.P., [1986, p.80-85, rus] 41-1370  
 Supplying engineering and geological data on mass construction objects. Khalme, N.M., et al, [1986, p.37-49, rus] 41-1537  
 Mathematical model and forecasts of thermokarst evolution. Grigorian, S.S., et al, [1986, p.45-49, rus] 41-1636  
 Methods of predicting destructive cryogenic phenomena associated with the development of an area from the example of NW Siberia. Mel'nikov, P.I., et al, [1986, p.44-49, eng] 41-1791  
 Origin of some buried ice forms in the Yamal tundra. Krass, M.S., et al, [1986, p.66-75, rus] 41-1793  
 Pleistocene glaciations in East Asia. Bessalyt, V.G., ed, [1984, 212p., rus] 41-1910  
 Compiling maps for evaluating potential thermokarst sagging. Garagulia, L.S., et al, [1986, p.77-95, rus] 41-2087  
 Classification of exogenic relief-forming processes on land. Vyrkin, V.B., [1986, p.20-24, rus] 41-2247  
 Cryolithozone of central Asia. Gorbunov, A.P., [1986, 57p., rus] 41-2349  
 Ground ice. Shvetsov, P.F., et al, [1986, p.36-45, rus] 41-2534  
 Evidence for Holocene thaw unconformity at Mayo, Yukon Territory. Burn, C.R., et al, [1986, p.794-803, eng] 41-2684  
 Engineering geology in construction. Ziagirov, R.S., et al, [1986, 175p., rus] 41-2889  
 Formation of engineering-geological conditions in Central Mongolia. Vasil'ev, V.I., et al, [1987, 144p., rus] 41-2983  
 Maps of technogenic thermokarst development potential. Parmuzin, S.I.U., et al, [1986, p.184-193, eng] 41-3198  
 Map of distribution and discontinuity of permafrost in western Siberia. Fotiev, S.M., [1986, p.38-52, rus] 41-3485  
 Regionalization of northwestern Siberia according to thermokarst development. Parmuzin, S.I.U., [1986, p.78-85, rus] 41-3488  
 Remote sounding and interpretation of cryo-hydro-geochemical anomalies. Makarov, V.N., et al, [1986, p.133-144, rus] 41-3494  
 Buried Pleistocene glacier ice on the Yenisey River. Astakhov, V.I., [1986, p.286-295, eng] 41-3619  
 Coastal processes along the west coast of Yamal. Smirnov, V.M., [1986, p.317-321, eng] 41-3623  
 Regional investigations of thermal erosion. Voskresenskii, K.S., et al, [1986, p.61-63, rus] 41-4064  
 Thermokarst features on Mars. Costard, F., [1986, p.123-131, fre] 41-4423  
 Land reclamation under permafrost conditions. [1984, p.19-24, rus] 41-4484  
 Studies of migration from mud mounds with the use of multiband aerial photographs. Gromova, E.I., [1983, p.142-150, rus] 41-4612
- Thermokarst lakes**  
 Technical schemes for melting natural ice for water-supply systems. Vdovin, I.U.I., [1986, p.189-193, rus] 41-2176
- Thermometry**  
 See: Temperature measurement
- Thermopiles**  
 Bridge construction under severe climatic conditions. Veinblat, B.M., et al, [1986, p.9-11, rus] 41-1887  
 Studying heat and mass transfer in frozen ground around thermopiles. Nesterov, I.I., et al, [1986, p.1127-1130, rus] 41-2537

**Thermopiles (cont.)**

- Controlling soil temperature of bases using seasonally active cooling devices. Vialov, S.S., ed, [1983, 123p, rus] 41-4470
- Experience and prospects of using self-contained steam-liquid cooling devices in construction on permafrost. Khruastalev, L.N., et al, [1983, p.3-12, rus] 41-4471
- Controlling temperature regime of frozen massive rocks in northern construction. Makarov, V.I., [1983, p.13-29, rus] 41-4472
- Seasonally active ground cooling devices used in hydraulic construction. Buchko, N.A., [1983, p.29-40, rus] 41-4473
- Using artificial cooling devices in permafrost areas. Gapeev, S.I., [1983, p.41-58, rus] 41-4474
- Regularities governing the development of forms of artificially frozen zones obtained by seasonally active freezing devices. Koval'kov, V.P., [1983, p.58-71, rus] 41-4475
- Interaction of thermopiles with artificially frozen bases. Mirenburg, I.U.S., et al, [1983, p.82-88, rus] 41-4478
- Using thermopiles for construction in the Vorkuta region. Aleksandrov, I.U.A., [1983, p.88-94, rus] 41-4479
- Using thermopiles in cooling plastic frozen ground. Petrov, B.G., et al, [1983, p.94-107, rus] 41-4480
- Using thermopiles in network construction. Smirnov, V.N., [1983, p.108-118, rus] 41-4481

**Thickness**

- Unconfined ice-shelf flow. Morland, L.W., [1987, p.99-116, eng] 41-3276

**Thixotropic sleeves**

- Guide to the construction of bases and foundations (supplement to construction norms and regulations SNiP 3.02.01-83). [1986, 567p., rus] 41-2968

**Thixotropy**

- Composition and behavior of sand-clay soils under vibration. Ostrovskaya, O.V., [1986, p.108-111, rus] 41-2542
- Design and construction of foundations in northwestern USSR. Sotnikov, S.N., et al, [1986, 95p., rus] 41-2911
- Relationship of composition and behavior of sandy-clayey soils upon vibration. Ostrovskaya, O.V., [1986, p.112-115, eng] 41-3018
- Non-destructive control method for studying thixotropic changes in clayey grounds. Voznesenskii, E.A., et al, [1987, p.80-94, rus] 41-3400
- Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed, [1986, 165p., rus] 41-3428
- Dialocations and permafrost development in the Pleistocene deposits of northern USSR. Popov, A.I., [1986, p.146-153, rus] 41-3429

**Tibet****Xixabangma Glacier**

- Snow chemistry from Xixabangma Peak, Tibet. Mayewski, P.A., et al, [1986, p.542-543, eng] 41-4312

**Tidal currents**

- Effects of ice cover on tidal currents and freshwater content. Prinsenberg, S.J., [1986, p.298-327, eng] 41-153

- Tidal spectrum underneath antarctic ice shelves. Pedley, M., et al, [1986, p.13,001-13,009, eng] 41-1859

- Controls of the Ross Ice Shelf flow and mass balance. MacAyeal, D.R., [1983, 274p., eng] 41-3073

**Tides**

- Tidal power plants. Bernshteln, L.B., et al, [1987, 296p., (Pertinent p.239-273), rus] 41-3675

- Role of standing waves in dynamics of Weddell Sea ice sheet. Seidov, D.G., et al, [1986, p.90-93, eng] 41-3681

**Timberlines**

- See: Forest lines

**Tires**

- Ice traction of tires. Blaisdell, G.L., et al, [1986, 11p., eng] 41-3051
- After-action report—Reforger '85. Liston, R.A., [1986, 20p., eng] 41-3816

**Tissues**

- See: Plant tissues

**Tools**

- See: Equipment

**Topographic effects**

- Movement on the ice front. Gellatly, A., et al, [1986, p.294-299, eng] 41-1512

- Numerical simulation of orographic snowfall. Cotton, W.R., et al, [1986, p.1658-1680, eng] 41-2501

- Topographic Rossby waves over Antarctica. Egger, J., et al, [1987, p.110-115, eng] 41-3711

- Surface windfield over the antarctic ice sheet. Parish, T.R., et al, [1987, p.51-54, eng] 41-3712

**Topographic features**

- Quaternary research (Selected papers of the 11th INQUA Congress). Kartashov, I.P., ed, [1986, 200p., rus] 41-549

- Topography in the ablation area of the Khumbu Glacier, Nepal. Watanabe, O., et al, [1986, p.177-180, eng] 41-765

- General outline of the botanical investigations on Bouvetöya. Engelskjön, T., [1986, p.5-9, eng] 41-916

- Statistics for various U.S. terrain and water (ice) backgrounds. La Rocca, A.J., et al, [1980, 785p., eng] 41-1853

- Under-ice topography in the Arctic basin. McLaren, A.S., [1986, 163p., eng] 41-1932

- Air cushion vehicle *Larus* in the Beaufort Sea. Wainwright, J., et al, [1986, p.693-709, eng] 41-2052

- Observing the polar regions from space. Thomas, R.H., [1984, p.165-171, eng] 41-2338

- Under-ice topography of the Arctic Basin. McLaren, A.S., [1986, p.165-191, eng] 41-2658

- Wright Glacier volcanic plug and dike swarm, southeastern Alaska. Ford, A.B., et al, [1987, p.116-118, eng] 41-3467

- Mapping frozen strata in troughs of the BAM zone. An, V.V., et al, [1986, p.106-113, rus] 41-3491

- Cryogenic factor in the evolution of landscape-geodynamic structures. Sadovskii, A.I., et al, [1986, p.153-163, rus] 41-3496

- Surface topography of large ice masses from Landsat imagery. Dowdeswell, J.A., et al, [1987, p.16-23, eng] 41-3991

- Vegetation and terrain mapping in Alaska. Shashy, A., et al, [1986, p.779-786, eng] 41-3847

- Ice sheet topography and internal characteristics, Greenland and Antarctica. Hodge, S.M., [1987, p.237-255, eng] 41-3986

- See also: Bottom topography; Coastal topographic features; Surface topography

**Topographic maps**

- Analysis and simulation of altimeter performance for the production of ice sheet topographic maps. Partington, K.C., et al, [1986, p.141-145, eng] 41-757

- Multispectral digital image mapping of antarctic ice features. Swinbank, C., et al, [1986, p.159-163, eng] 41-761

**Topographic surveys**

- Ice core drill site at Law Dome summit. Hamley, T.C., et al, [1986, 34p., eng] 41-459

- Topographic analysis of the lower Kolyma River for cryolithologic mapping. Kaplina, T.N., et al, [1986, p.51-60, rus] 41-2819

- Area of antarctic ice shelves. Suetova, I.A., [1986, p.213-226, eng] 41-3201

- Seismic bedrock depth measurements and the origin of George VI Sound, Antarctic Peninsula. Maslany, M.P., [1987, p.51-65, eng] 41-3811

**Topography**

- Positive microrelief forms as a result of underground ice formation. Belopukhova, E.B., et al, [1986, p.84-88, rus] 41-110

- Improving the design of railroad routes. Turbinin, I.V., ed, [1984, 106p., rus] 41-2453

- Mechanized laying of communication cables under difficult conditions. Kuzmenko, V.V., et al, [1987, 161p., rus] 41-3609

- Dangerous glacial slope processes in mountain ecosystems of Siberia. Laptev, M.N., et al, [1986, p.63-65, rus] 41-4063

**Torsional strength**

- Torsional resistance of a single pile in a layered soil. Hache, R.A., et al, [1986, p.1004-1019, eng] 41-3172

**Towers**

- Antenna towers and antenna-supporting structures. [1981, 65p., eng] 41-493

- Atmospheric icing on communication masts in New England. Mulherin, N.D., [1986, 46p., eng] 41-3142

**Towing**

- See: Barge towing

**Trackers**

- Vehicle transport at McMurdo. Dibbern, J.S., [1986, 31p., eng] 41-638

- BV 6—a vehicle for arctic transportation. Ljunggren, [1986, p.1127-1137, eng] 41-1149

- Psycho-mathematical model of caterpillar tractors equipped with scraper attachments. Galtagori, M.M., et al, [1978, p.3-7, rus] 41-1311

- Caterpillar and wheeled hauling-tractors. Platonov, V.F., et al, [1986, 295p., rus] 41-1688

- Tracked firefighting vehicles for the Arctic and Antarctic. Pusch, A.A., [1986, p.649-669, eng] 41-2049

- Hydrologic conditions Connors Bog area, Anchorage, Alaska. Glass, R.L., [1986, 23p., eng] 41-2196

- March under arctic conditions. Makarov, V., [1986, p.74-76, rus] 41-3932

- Operation of technical equipment in freezing weather. Voloshnikov, D., et al, [1987, p.78-80, rus] 41-3933

**Tracking (position)**

- See: Radar tracking

**Tractors**

- Ice traction of tires. Blaisdell, G.L., et al, [1986, 11p., eng] 41-3051

- Determining economic effectiveness of technical equipment in the North. Dashkova, T.E., [1986, p.188-192, rus] 41-1207

- Caterpillar and wheeled hauling-tractors. Platonov, V.F., et al, [1986, 295p., rus] 41-1688

**Trafficability**

- Problems of snow cover classification when studying its trafficability by different type vehicles. Ushakov, A.I., [1986, p.146-149, rus] 41-1658

- Trafficability of snow cover by wheeled vehicles from experimental data. Ioffe, D.I.A., et al, [1986, p.146-153, rus] 41-2168

- Driving commander's vehicle in snow fields. Gnidyat, A., [1986, p.76-78, rus] 41-3931

- See also: Soil trafficability

**Transition heating**

- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed, [1986, 81p., rus] 41-2916

- Double air and hot-air curtains in entrances to industrial buildings. Ievlev, M.V., [1986, p.26-32, rus] 41-2917

**Transmission**

- See also: Power line supports

**Transmission lines**

- Countermeasures against damage by heavy snowfall in Akita District. Iwasawa, S., [1985, p.16, jpn] 41-179

- Countermeasures for ice and snow accumulation on transmission lines. Asai, S., [1985, p.26-27, jpn] 41-183

- Low temperature excess loss of loose tube fiber cables. Stuefflotten, S., [1982, p.4300-4307, eng] 41-263

- Transmission loss of coated single-mode fiber at low temperatures. Katsuyama, Y., et al, [1980, p.4200-4205, eng] 41-264

- Low-temperature behaviour of high-birefringence fibres. Marrone, M.J., et al, [1985, p.703-704, eng] 41-1410

- Frost-resistant coated optical fibres. Abramov, A.A., et al, [1985, p.805-807, eng] 41-1411

- Transmission loss at low temperature of an optical fibre. Yamakawa, S., et al, [1984, p.199-201, eng] 41-1916

- Construction of electric power lines for main pipelines. Manual. Amopolin, A.G., et al, [1986, 164p., (Pertinent p.127-138), rus] 41-2890

- Probabilities of ice, wind and temperature loads on electrical transmission lines. Gartsman, L.B., [1987, 200p., rus] 41-3245

- Mechanized laying of communication cables under difficult conditions. Kuzmenko, V.V., et al, [1987, 161p., rus] 41-3609

- See also: Power lines

**Transmissivity**

- Non-resonant acoustic burke (NRAP) for low frequency studies. Purker, S.P., et al, [1985, p.454-459, eng] 41-227

- Lake ice, radiation, and oxygen deficit at temperate lakes. Prowse, T.D., et al, [1986, p.386-403, eng] 41-4536

- See: Radiation absorption, Transmission

**Transparency**

- See: Light transmission

**Transportation**

- Carbon dioxide gas exchange components of tundra plants at various temperatures. Lediakina, N.A., et al, [1986, p.1067-1073, rus] 41-1455

- Economic prerequisites for development in the northern Ural. Pakhomov, V.P., [1985, p.3-14, rus] 41-204

- Some aspects of economic development of northern regions. Loginov, V.G., [1985, p.15-21, rus] 41-205

- Task economic complexes in the northern regions. Maslennikov, V.V., [1985, p.28-32, rus] 41-206

- Brittleness of reinforced concrete structures under arctic conditions. Kivkäs, L., et al, [1986, 20p., eng] 41-213

- SA-15 ships for ice navigation in northern rivers. Varaksin, K.N., et al, [1985, p.54-56, rus] 41-490

- Efficiency of small Arctic barges. Vysotskaya, N.A., [1985, p.61-62, rus] 41-491

- Ice navigation properties of timber-transporting ships. Sokolov, L.G., et al, [1984, p.29-37, rus] 41-542

- Research on transportation facilities in cold regions. Andersland, O.B., ed, [1986, 105p., eng] 41-639

- Arctic research in the national interest. Washburn, A.L., et al, [1986, p.633-639, eng] 41-1033

- Transportation of heavy modules to the Arctic. Kirkeide, K.L., et al, [1986, p.1160-1168, eng] 41-1151

- Transportation in northern regions. Derbyshev, A.S., [1986, p.60-63, rus] 41-1203

- Determining economic effectiveness of technical equipment in the North. Dashkova, T.E., [1986, p.188-192, rus] 41-1207

- Tugboat-barge equipped for ice navigation. [1985, p.80-81, rus] 41-1520

- Finland to build ice-breaking cargo ships and snow-going vehicles. [1985, p.100-102, rus] 41-1521

- Analyzing transportation costs of modular construction objects in permafrost regions. Rastorguev, G.A., [1986, p.19-20, rus] 41-1527

- Snow-dumping places and snow transport. Kareoja, T., [1983, p.274-278, fin] 41-1936

- Transportation considerations in Arctic mining development. Giegerich, H., [1986, p.352-367, eng] 41-2035



- Air and ice road transportation to support northern mines. Tamblin, H., et al, [1986, p.368-375, eng] 41-2036
- Air/ground transportation in Antarctic logistics support. Baker, M.J., et al, [1986, p.376-419, eng] 41-2037
- Tracked firefighting vehicles for the Arctic and Antarctic. Pusch, A.A., [1986, p.649-669, eng] 41-2049
- CATCO: remote all terrain heavy transportation. Peterson, S., [1986, p.670-678, eng] 41-2050
- Flowtans-transportation systems for difficult "off-road" terrain. Davis, R.M., et al, [1986, p.679-692, eng] 41-2051
- Operation of light air cushion vehicle at McMurdo Sound. Dibbern, J.S., [1987, 139p., eng] 41-2257
- Esso-SINTEF Norwegian Arctic Research Program. Setchfield, T.L., [1986, p.167-178, eng] 41-2272
- Petroleum engineering impact on northern swamps. Polkoshnikova, O.V., et al, [1982, p.198-209, eng] 41-2344
- Pipeline transport in mining industry. Pokrovskaya, V.N., [1985, 139p., rus] 41-2712
- Dust control on quarry roads at subzero temperatures. Loboda, A.I., et al, [1985, p.135-136, rus] 41-2771
- Transportation of heavy blocks on ice-snow roads. Rastorguev, G.A., et al, [1986, p.13-14, rus] 41-2780
- Comparative efficiency of coal transportation by railroad and by hydraulic pipelines. Fainvetts, V.I.A., et al, [1986, p.22-24, rus] 41-2783
- Scientific-technical preparation for economic development of Yamal Peninsula. [1987, p.31-34, rus] 41-2784
- Strength of materials and structural elements at low temperatures. Chernik, N.V., ed, [1985, 119p., rus] 41-2846
- Working fitness and durability of equipment in the North. Larionov, V.P., et al, [1985, p.5-13, rus] 41-2847
- Organization of construction under special environmental and climatic conditions. Construction manual. Shakhparonov, V.V., et al, [1986, 255p., rus] 41-2862
- Organizing construction of the Kureyskaya hydroelectric power plant. Zaitman, O.M., et al, [1986, p.17-23, rus] 41-2864
- Atlas of the polar regions. [1985, 66p., eng] 41-2884
- Dredge-excavation of ground. Ogorodnikov, S.P., [1986, 256p., rus] 41-2913
- Mobile dwellings for the North. Saprykina, N.A., [1986, 215p., rus] 41-3012
- Urban planning and construction problems in Siberia. Krushinskii, V.I., [1986, p.40-45, rus] 41-3259
- Navigation and ship control. Collection of works. Panin, I.U.I., ed, [1986, 137p., rus] 41-3383
- Icebreaker pilotage of "Dmitrii Donskoi" type ships along the Yenisey River in the winter-spring season. Plotnikov, K.S., [1986, p.98-103, rus] 41-3384
- Modeling turbogear assemblies of ice-navigating ships. Baalygin, G.M., [1986, p.39-48, rus] 41-3389
- Automatic control system for diesel ventilation aggregates of air-cushion vehicles. Glukhikh, V.G., et al, [1987, p.38-39, rus] 41-3392
- Rational use of natural resources under northern conditions. Collection of works. Agafonov, N.T., ed, [1985, 113p., rus] 41-3433
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481
- Compilation of a regional geocryological forecast based on small-scale maps of natural complexes in the cryolithozone of western Siberia. Kritauk, L.N., et al, [1986, p.53-67, rus] 41-3486
- Transportation in regions of new economic development. Prokofeva, T.A., et al, [1986, 208p., rus] 41-3663
- Artificial freezing of cohesive soils for preventing adhesion. Mochalov, V.I., et al, [1986, p.15-17, rus] 41-3768
- Environmental impact on motor vehicle transport in the North. Belinskii, B.V., [1986, p.168-169, rus] 41-3978
- Conference of geologists, from Siberia and the Far East, on the role of geography in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. [1986, 166p., rus] 41-4060
- Stability of tundra landscapes under transport loads. Zimov, S.A., et al, [1986, p.22-23, rus] 41-4063
- Man, sea, technology. Narusbaev, A.A., ed, [1987, 335p., rus] 41-4145
- Ships used in the exploitation of offshore deposits. Gornshel'nik, K., et al, [1987, p.221-231, rus] 41-4147
- Winter roads in the Arkhangel'sk forests. Iakovenko, I.U.G., [1987, p.40-45, rus] 41-4172
- Perfecting the methods of developing mineral deposits in the North. Skuba, V.N., ed, [1986, 81p., rus] 41-4546
- Increasing safety of underground mining by using power driven equipment. Kivileva, N.M., [1986, p.25-30, rus] 41-4551
- Mining technology designed for saving mineral resources. Al'tahuler, V.M., ed, [1987, 94p., rus] 41-4558
- Methods of transporting dumped refrozen ore masses. Eremin, G.M., [1987, p.41-44, rus] 41-4559
- Pollution impact on the environmental functions of northern taiga. Chertovskoi, V.G., [1987, p.67-72, rus] 41-4569
- See also: Marine transportation; Military transportation; Petroleum transportation; Tanker ships
- Traverses
- JARE 25 wintering party activities, 1984-1985. Hirasawa, T., [1986, p.113-137, jpn] 41-980
- Report on the 24th Soviet Antarctic Expedition. [1986, 139p., rus] 41-1263
- Geophysical fieldwork on the Ronne Ice Shelf. Herrod, L.D.B., et al, [1986, p.9-14, eng] 41-1786
- Operating of the Antarctic icebreaker *Shirase* and traverse by snow vehicle. Ishizawa, K., [1986, p.563-578, eng] 41-2046
- JARE-27 field report, Sør Rondane Mountains, 1986. Moriaki, K., et al, [1986, p.246-281, jpn] 41-2695
- JARE-26 glaciological research, 1984-1986. Ageta, Y., et al, [1987, 71p., eng] 41-3668
- Tree lines
- See: Forest lines
- Trees (plant lines)
- Snow damage to trees in NE Japan. Tsukahara, H., et al, [1984, p.133-138, eng] 41-708
- Tree deformation due to snow pressure. Taira, H., [1984, p.139-147, eng] 41-709
- Plant ecology at the alpine timberline, New Zealand. Norton, D.A., et al, [1984, p.361-370, eng] 41-1236
- Compiling dendroclimatograms for distinguishing glaciation conditions. Solomina, O.N., [1986, p.106-112, rus] 41-1648
- White spruce in the Brooks Range, Alaska. Cooper, D.J., [1986, p.247-252, eng] 41-1868
- Freezing tolerance of Douglas fir in the inland Northwest. Rehfeldt, G.E., [1986, 5p., eng] 41-2185
- Fir trees. Krylov, G.V., et al, [1986, 238p., rus] 41-2259
- Structural-functional interrelationships and productivity of phytocenoses. Buzikin, A.I., ed, [1983, 140p., rus] 41-2746
- Radial growth of conifers in different Angara River forest areas. Dashkovskaya, I.S., [1983, p.82-94, rus] 41-2748
- Interrelationships among components of biogeocenoses in southern taiga. Smirnov, A.V., ed, [1986, 120p., rus] 41-2898
- Dendrochronologies of San Rafael and Soler areas, Patagonia. Sweda, T., et al, [1987, p.125-132, eng] 41-3837
- Studying pollutant accumulation in air, snow and vegetation. Kazachevskii, I.V., et al, [1987, p.91-102, rus] 41-3947
- Trenching
- Frozen ground excavation by trenching machines. Sokolov, L.K., [1978, p.57-63, rus] 41-1322
- Blasting-mechanical method of excavating frozen ground. Rzhnevskii, V.A., et al, [1986, p.16-18, rus] 41-1526
- Construction of structures and foundations by the grout curtain method. Smorodinov, M.I., et al, [1986, 216p., rus] 41-2886
- Dredge-excavation of ground. Ogorodnikov, S.P., [1986, 256p., rus] 41-2913
- Failure of frozen soils by high-pressure hydraulic jets in trench and pit construction. Petrosian, L.R., et al, [1986, p.194-197, eng] 41-2946
- Rotary trench excavators for permafrost. Bondarenko, V.P., [1987, p.15-16, rus] 41-3067
- Marine pipeline design in ice environments. McKeehan, D.S., [1986, p.9-17, eng] 41-3087
- Classifying frozen ground according to abrasion power. Leshchiner, V.B., et al, [1982, p.8-14, rus] 41-3545
- Triaxial tests
- Yield envelope for confined ice. Nadreau, J.P., et al, [1986, p.25-36, eng] 41-1580
- Trucks
- See: Motor vehicles
- Tundra
- Fate of petroleum pollutants in Arctic ecosystems. Atlas, R.M., [1986, p.59-67, eng] 41-345
- Vegetation of a high Arctic tundra, Svalbard. Nimis, P.L., [1985, p.47-58, eng] 41-372
- Thermal properties of sandur and tundra regions due to weather conditions. Joly, D., [1985, p.95-101, fre] 41-376
- One hundred years of genetic pedology. Kovda, V.A., ed, [1986, 276p., rus] 41-521
- Recent cryological problems of the Dokuchaev pedology. Makeev, O.V., et al, [1986, p.118-125, rus] 41-522
- Mathematical modelling. Processes in complex economic and ecological systems. Samarskii, A.A., ed, [1986, 295p., rus] 41-547
- Modeling tundra populations and communities. Barbikov, E.V., et al, [1986, p.207-219, rus] 41-548
- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Brattsev, A.P., ed, [1986, 119p., rus] 41-1167
- Reaction of tundra vegetation to petroleum pollution induced by drilling. Gnat, L.V., [1986, p.82-93, rus] 41-1171
- Effect of fertilizer on production of tussock tundra, Alaska. Shaver, G.R., et al, [1986, p.261-268, eng] 41-1175
- Pollen, vegetation and climatic relationships along the Dalton Highway, Alaska. Short, S.K., et al, [1986, p.57-72, eng] 41-1188
- Plant production and distribution in Alaskan tundra. Fox, J.F., [1985, p.199-204, eng] 41-1230
- Carbon balance of arctic tundra. Peterson, K.M., et al, [1984, p.331-335, eng] 41-1234
- Phytoedaphic relationships in alpine tundra, Colorado. Eddleman, L.E., et al, [1984, p.343-359, eng] 41-1235
- Pollen deposition and distribution of shrubs in the Arctic tundra. Jacobs, J.D., et al, [1985, p.279-287, eng] 41-1249
- Alaskan atmospheric methane sources. Sebachner, D.I., et al, [1986, p.1-10, eng] 41-1259
- Southern tundras of Taymyr. Chernov, I.U.I., ed, [1986, 208p., rus] 41-1331
- Vegetation of southern tundras in western Taymyr Peninsula. Matveeva, N.V., et al, [1986, p.5-67, rus] 41-1332
- Seasonal dynamics of plant communities in southern Taymyr tundras. Zankha, L.L., [1986, p.135-150, rus] 41-1338
- Microorganisms in the communities of southern Taymyr tundras. Parinkina, O.M., [1986, p.151-168, rus] 41-1339
- Chemical composition of tundra soils in western Taymyr. Chugunova, M.V., [1986, p.169-173, rus] 41-1340
- Southern tundras in the system of zonal subdivision. Chernov, I.U.I., et al, [1986, p.192-204, rus] 41-1341
- Carbon dioxide gas exchange components of tundra plants at various temperatures. Lediakina, N.A., et al, [1986, p.1067-1073, rus] 41-1455
- Possible routes of pollution transport to the Arctic. Krasovskaya, T.M., [1986, p.93-96, rus] 41-1645
- Origin of some buried ice forms in the Yamal tundra. Krass, M.S., et al, [1986, p.66-75, rus] 41-1793
- Man-induced erosion in Bol'shezemel'skaya tundra. Zharkova, I.U.G., [1986, p.94-98, rus] 41-1794
- Primary successions of Arctic tundras on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.99-105, rus] 41-1820
- Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., [1986, p.49-67, rus] 41-1822
- Yeasts from Arctic East Siberian tundra. Golubev, V.I., [1986, p.609-612, rus] 41-1825
- Heterotrophic bacteria from soils of Arctic East Siberian tundra. Velikova, V.L., [1986, p.613-616, rus] 41-1826
- Nivation and local glaciation in N. and S. Sweden. A progress report. Rapp, A., et al, [1986, p.197-205, eng] 41-1878
- Pleistocene glaciations in East Asia. Bessalyt, V.G., ed, [1984, 212p., rus] 41-1910
- Thermocorrosion of frozen sediment under wave action. Kobayashi, N., et al, [1986, p.140-158, eng] 41-2016
- Experiences with High Arctic offstrip aircraft operations. Doyle, P., [1986, p.495-511, eng] 41-2041
- CATCO: remote all terrain heavy transportation. Peterson, S., [1986, p.670-678, eng] 41-2050
- Flowtans-transportation systems for difficult "off-road" terrain. Davis, R.M., et al, [1986, p.679-692, eng] 41-2051
- Project of the experimental Yamberg ice-core dam. Danielian, I.U.S., et al, [1986, p.183-189, rus] 41-2175
- Reproduction of *Eriophorum vaginatum* by seed in Alaskan tussock tundra. Gartner, B.L., et al, [1986, p.1-18, eng] 41-2188
- Environmental control of nutrients in Alaskan tussock tundra. Chapin, F.S., III, et al, [1986, p.167-195, eng] 41-2189
- Seasonal growth and biomass in hummocks of Alaskan tussock tundra. Shaver, G.R., et al, [1986, p.257-278, eng] 41-2190
- Impacts of increasing CO2 on natural vegetation, particularly the tundra. Oechel, W.C., et al, [1986, p.36-42, eng] 41-2217
- Impact of oilfield development on shorebirds, Prudhoe Bay, Alaska. Meehan, R.H., [1986, 92p., eng] 41-2287
- Primary succession in Arctic tundra on the west coast of Spitsbergen (Svalbard). Tishkov, A.A., [1986, p.148-156, eng] 41-2341
- Age and evolution of soils in the USSR. Ivanov, I.V., ed, [1986, 230p., rus] 41-2352
- Buried soils of northeastern Yakutia (the Khallerchinskaya tundra). Fominykh, L.A., et al, [1986, p.109-120, rus] 41-2354
- Wellsite cleanup on the National Petroleum Reserve, Alaska. Smith, P.D.J., [1986, 49p. + append., eng] 41-2450
- Water and bottom muds in reserve pits, Alaska. Pollen, M.R., [1986, 164p. + append., eng] 41-2451
- Tundra plant responses on the National Petroleum Reserve, Alaska. McKendrick, J.D., [1986, 225p., eng] 41-2452
- All-Union Conference on the present state and prospects of scientific research in Siberian preservation parks, Novosibirsk, Aug. 26-28, 1986. Summaries. [1986, 165p., rus] 41-2456
- Mixed-grass-edge tundra soils of Wrangel Island. Orlovskii, S.D.D., [1986, p.98, rus] 41-2460
- Eriophorum vaginatum* annual and latitudinal growth variation. Shaver, G.R., et al, [1986, p.1524-1535, eng] 41-2480
- Floristic findings in Penikney Bay, Chukotkiy Peninsula. Sekretareva, N.A., [1986, p.677-683, rus] 41-2563

**Tundra (cont.)**

- Problems of physical geography and geobotanics. Selected works. Sochava, V.B., [1986, 343p., rus] 41-2753
- Lichens in western Chukot highlands (Paliavaam River). Makarova, I.I., [1986, p.105-108, rus] 41-2778
- Development of Holocene peat hummocks in northwestern Siberia. Vasil'chuk, I.U.K., et al, [1986, p.123-128, rus] 41-2828
- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed, [1986, 81p., rus] 41-2916
- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, [1986, p.36-41, rus] 41-2918
- Exploration and economic evaluation of petroleum deposits in subarctic regions. D'yachkova, E.A., [1987, 108p., rus] 41-2961
- Life upon the permafrost. Bruemmer, F., [1987, p.30-39, eng] 41-3148
- Floral processes. Wielgolaski, F.E., [1987, p.80-94, eng] 41-3235
- Hydrothermal regime of taiga and tundra soils of northeastern Europe. Kononenko, A.V., [1986, 145p., + inserts, rus] 41-3246
- Geophysics and man-induced changes of landscapes in the Chukotskiy Peninsula. Ignatenko, I.V., et al, [1987, 271p., rus] 41-3247
- Combined use of vegetational resources in the north European USSR. Chertovskoi, V.G., [1985, p.26-31, rus] 41-3434
- Scientific-technological progress and the development of northern natural resources. Chistobaev, A.I., et al, [1985, p.42-51, rus] 41-3435
- Rational use and preservation of ecosystems in the North. P'yavchenko, N.I., [1985, p.68-75, rus] 41-3437
- Problems of geocryological mapping. Grave, N.A., ed, [1986, 172p., rus] 41-3481
- Compilation of a regional geocryological forecast based on small-scale maps of natural complexes in the cryolithozone of western Siberia. Kritskii, L.N., et al, [1986, p.53-67, rus] 41-3486
- Remote sensing and interpretation of cryo-hydro-geochemical anomalies. Makarov, V.N., et al, [1986, p.133-144, rus] 41-3494
- All-Union Conference on organisms, populations and associations under extreme conditions, Moscow, Nov. 24-26, 1986. Summaries of reports. Sokolov, V.E., ed, [1986, 154p., rus] 41-3539
- Peculiarities of microbe associations in the Far North and Pamir highlands. Bab'eva, I.P., et al, [1986, p.12-13, rus] 41-3540
- Grass-shrub vegetation developing on Arctic sand dunes. Sergienko, V.G., [1987, p.208-215, rus] 41-3610
- Science and public policy: program and abstracts of the conference. [1984, 251p., eng] 41-3615
- Climatic reconstructions from geocryological data. Danilov, I.D., et al, [1986, p.303-308, eng] 41-3621
- Natural associations of the Arctic and their protection. Korotkevich, E.S., ed, [1986, 120p., rus] 41-3860
- Protected territories of the North. Uspenskii, S.M., et al, [1986, p.18-24, rus] 41-3862
- Human factors in the development of basic Arctic geosystems. Govorukha, L.S., [1986, p.24-30, rus] 41-3863
- Conference of geologists from Siberia and the Far East, on the role of geology in furthering scientific and technical progress, 8th, Irkutsk, 1987. Summaries of reports. Vol.2. [1986, 166p., rus] 41-4060
- Stability of tundra landscapes under transport loads. Zimov, S.A., et al, [1986, p.22-23, rus] 41-4063
- Regional investigations of thermal erosion. Voskresenskii, K.S., et al, [1986, p.61-63, rus] 41-4064
- Thermal erosion in the Baykal Amur railroad zone. An, V.V., et al, [1984, p.35-39, rus] 41-4356
- Vegetation of Beechey Point, Alaska. Walker, D.A., et al, [1987, 63p., eng] 41-4367
- Changes induced by industrial activities in the Upper Kolyma basin. Grigor'eva, N.N., et al, [1986, p.9-13, rus] 41-4467
- See also: Alpine tundra; Forest tundra
- Tunneling (excavation)**
- Stability study of CIREL permafrost tunnel. Huang, S.L., et al, [1986, p.777-790, eng] 41-230
- Tunnels**
- Stresses on low-rise buildings on frost heaving ground. Abzhilimov, R.Sh., [1985, p.32-34, rus] 41-290
- State of stress and thermal stresses in concretes and reinforced concretes of hydraulic structures. Karavaev, A.V., ed, [1985, 104p., rus] 41-428
- Underground rock temperatures at the Kolyma power plant. Kuznetsov, V.S., et al, [1985, p.26-29, rus] 41-429
- Condensing steam tunnel heat sinks. Lunardini, V.J., [1986, 29p., eng] 41-1350
- Subway construction under severe climatic conditions. Smirnov, S.A., et al, [1986, p.15-17, rus] 41-1532
- Frost insulation in rock tunnels. Pedersen, K.B., et al, [1986, p.15-18, eng] 41-2261
- Design and construction of the sole part of the Kureyskaya channel dam. Makarov, V.A., et al, [1986, p.27-31, rus] 41-2866
- Concrete work at the Kureyskaya power plant site. Bukhman, V.I., [1986, p.50-54, rus] 41-2869
- Concrete lining of tunnels. Belkin, M.N., et al, [1987, p.63-67, rus] 41-3809
- See also: Ice tunnels; Railroad tunnels
- Turbidity**
- Influence of moraines on turbidity of glacial waters. Tikhonovskaya, A.A., et al, [1986, p.123-128, rus] 41-783
- See also: Visibility
- Turbulence**
- Measurements of refractive index spectra over snow. Andreas, E.L., [1986, p.248-260, eng] 41-2284
- Turbulent boundary layer**
- Bulk transfer coefficients for heat and momentum over leads and polynyas. Andreas, E.L., et al, [1986, p.1875-1883, eng] 41-2220
- Turbulent exchange**
- Evaluating parameters of atmospheric surface layer above sea ice, observed from a moving ship. Makshtas, A.P., et al, [1986, p.139-145, eng] 41-3265
- Turbulent flow**
- Water discharge during surges of Variegated Glacier, Alaska. Humphrey, N., et al, [1986, p.195-207, eng] 41-679
- Turbulence effect on heat and mass transfer in boundary layers. Zaitsev, S.A., et al, [1985, p.1-8, eng] 41-1005
- Turbulent free convection on a large vertical icewall in seawater. Gominho, L.C., et al, [1984, 7p., eng] 41-1787
- Continuum mixture theory with application to turbulent snow. Decker, R.A., [1986, 110p., eng] 41-2641
- Upper ocean. McPhee, M.G., [1986, p.339-394, eng] 41-2990
- Circulation and mixing in ice-covered waters. Carmack, E.C., [1986, p.641-712, eng] 41-2996
- Snow drain system—velocity formula for snow-laden water flow. Sato, T., et al, [1983, p.9-16, eng] 41-4133
- Turbulent transfer in a stratified oceanic boundary layer. McPhee, M.G., [1987, p.6977-6986, eng] 41-4254
- Turf**
- See: Peat
- U.S. Army CIREL**
- Corps of engineers seek ice solutions. Frankenstein, G.E., [1987, p.5-7, eng] 41-3140
- Ultrasonic tests**
- Ultrasonic tests of grouting quality in concrete dams. Ermoshin, V.M., et al, [1986, p.33-36, rus] 41-1922
- Ultrasonic attenuation and dislocation damping in crystals of ice. Tamura, J., et al, [1986, p.3445-3461, eng] 41-2975
- Underground facilities**
- Ground surface temperature above underground heat-pipelines. Tikhomirov, A.L., et al, [1986, p.94-97, rus] 41-2757
- Underground hydraulic structures in permafrost. Gevirts, G.I.A., et al, [1986, p.190-197, rus] 41-3462
- Underground ice**
- See: Ground ice
- Underground pipelines**
- Heat and mass transfer in soil. Shapiro, H.N., et al, [1978, p.19-24, eng] 41-465
- Analysis of the freezing around a chilled pipe in darcy flow. Okada, M., et al, [1978, p.31-36, eng] 41-467
- Study of buried-pipe failures in cold climates. Bahmanyar, G.H., [1982, 205p., eng] 41-900
- Engineering and geological investigations of saline soils. Bakonov, B.B., et al, [1986, 245p., rus] 41-996
- Icing on walls of buried pipeline carrying a freezing liquid. Ovsiannikov, V.M., [1986, p.212-219, eng] 41-1893
- Deformation of a pipeline by frost heave. [1987, p.10, eng] 41-2321
- Norman Wells Expansion Project—overview. Tibbatts, R.M., [1986, p.51-59, eng] 41-2514
- Norman Wells Pipeline Project. Pick, A.R., [1986, p.61-66, eng] 41-2515
- Design of Norman Wells pipeline for frost heave and thaw settlement. Nixon, J.F., et al, [1986, p.67-85, eng] 41-2516
- Quill Creek test facility. Fielder, D.E., [1986, p.86-115, eng] 41-2517
- Polar gas project: structural design aspects. Workman, G.H., [1986, p.116-125, eng] 41-2518
- Monitoring of thawing permafrost slopes. McRoberts, E.C., et al, [1986, p.133-151, eng] 41-2520
- Canada-France buried chilled pipeline experiment. Williams, P.J., [1986, p.152-159, eng] 41-2521
- Multi-dimensional problems for melting or freezing around a buried tube. Zhang, G.-P., [1986, 167p., eng] 41-2588
- Freezing around a buried pipe. Sadegh, A.M., et al, [1987, p.223-232, eng] 41-2981
- Marine pipeline design in ice environments. McKeen, D.S., [1986, p.9-17, eng] 41-3087
- Some recent studies relating to the determination of pipeline depths. Marcellus, R.W., et al, [1986, p.295-303, eng] 41-3122
- Feasibility study for stresses in a pipeline buried in freezing soil. [1982, 29p., eng] 41-3505
- Observations and predictions of frost heave around a chilled pipeline. Dallimore, S.R., [1985, 110p., eng] 41-3647
- Durability considerations—precast concrete pipe. Bealey, M., [1987, p.193-508, eng] 41-3699
- Experimental studies on reducing methods of uplift force to a steel pipe. Chikuda, M., et al, [1986, p.109-120, jpn] 41-3884
- Thermally induced heave beneath chilled pipelines in frozen ground. Nixon, J.F., [1987, p.260-266, eng] 41-4055
- Structural criteria for pipelines in Arctic and earthquake regions. Price, P.S.J., et al, [1987, p.89-97, eng] 41-4629
- Buried Arctic pipelines subjected to thaw settlement. Workman, G.H., [1987, p.131-138, eng] 41-4634
- Underground storage**
- Problems of ecology and environmental protection (Collections of papers of the First Republic Conference), Vol.1. [1983, 292p., rus] 41-519
- Underground storage of petroleum products in the Far North. Braiko, V.N., et al, [1983, p.107-109, rus] 41-520
- Thermal behavior of a cryogenic storage pilot station. Cames-Pintaux, A.M., et al, [1986, p.105-114, eng] 41-1281
- Recommendations for the design and construction of geocryogenic coolers. Kuz'min, G.P., et al, [1986, 66p., rus] 41-3329
- Underice**
- See: Ice bottom surface; Subglacial
- Underwater acoustics**
- Ocean engineering and the environment—Oceans '85 Conference, Vol.1. [1985, 2 vols. (1364p.), eng] 41-217
- Science program of the FRAM experiments in the Eastern Arctic Ocean. Baggeroer, A.B., et al, [1985, p.420-428, eng] 41-221
- Underwater noise due to rain, hail, and snow. Scrimger, J.A., et al, [1987, p.79-86, eng] 41-2332
- Ocean dynamics and acoustic fluctuations in the Fram Strait marginal ice zone. Dyer, I., et al, [1987, p.435-436, eng] 41-2805
- Characterization of Arctic undersea noise. Veitch, J.G., et al, [1983, 28p. + figs., eng] 41-3382
- Use of acoustics in localizing under-ice oil spills. Francois, R.E., et al, [1983, 17p., eng] 41-3927
- Acoustic propagation through an ice edge eddy, eastern Greenland Sea. Mellberg, L.E., et al, [1987, p.6857-6868, eng] 41-4243
- Acoustic tomography in the marginal ice zone. Lynch, J.F., et al, [1987, p.6869-6885, eng] 41-4244
- Tomographic resolution of mesoscale eddies in the marginal ice zone: a preliminary study. Chiu, C.-S., et al, [1987, p.6886-6902, eng] 41-4245
- Underwater ice**
- Evolution of under-water sides of ice shelves and icebergs. Orheim, O., [1987, p.176-182, eng] 41-4484
- Underwater permafrost**
- See: Permafrost beneath lakes; Permafrost beneath rivers; Subsea permafrost
- Underwater structures**
- See: Hydraulic structures
- Unfrozen water content**
- Effects of liquid water content in clouds on ice crystal production. Foster, T., et al, [1982, p.123-126, eng] 41-12
- Aircraft observations of large scale cloud systems. Cohen, I.D., [1982, p.203-206, eng] 41-16
- Liquid water and drop size in supercooled clouds. Jeck, R.K., [1982, p.408-411, eng] 41-45
- Supercooled liquid water and ice crystal distribution in winter storms. Heggli, M., et al, [1982, p.469-472, eng] 41-59
- Cloud liquid water in orographic storms. Rauber, R.M., et al, [1982, p.477-480, eng] 41-61
- Budget analysis of liquid water, vapor and ice in orographic clouds. Uttal, T., et al, [1982, p.572-575, eng] 41-70
- Moisture in hygroscopic materials. Efimov, S.S., [1986, 160p., rus] 41-1044
- Determination of the liquid water content of snow by the dye dilution technique. Grenfell, T.C., [1986, p.295-298, eng] 41-1297
- Some characteristics of unsaturated clay during freezing. Chen, X., et al, [1986, p.209-216, chi] 41-1417
- Permafrost formation in littoral and sublittoral zones of northern Eurasia. Maslov, A.D., [1986, p.79-85, rus] 41-2539
- Energy transfer in soil with nonequilibrium phase transformation. Danielian, I.U., et al, [1986, p.156-161, rus] 41-2558
- Transport of water in frozen soil 6. Effects of temperature. Nakano, Y., et al, [1987, p.44-50, eng] 41-3019
- Paleogeography and mineral resources of Pleistocene in northern Eurasia (collection of scientific works). Chochia, N.G., ed, [1986, 165p., rus] 41-3428

- Dislocations and permafrost development in the Pleistocene deposits of northern USSR. Popov, A.I., [1986, p.146-153, rus] 41-3429
- Ground waters in southern West Siberia (Formation and problems of rational utilization). Nikolaev, V.A., ed, [1987, 166p., rus] 41-3649
- Peculiarities of ground water formation in the zone of exogenic processes of the West Siberian plateau. Smolentsev, I.U.K., et al, [1987, p.4-65, rus] 41-3650
- Infrared measurement of free-water content and grain size of snow. Hyvärinen, T., et al, [1987, p.342-348, eng] 41-3780
- Elaboration of two methods to investigate unfrozen water movement in a snow-soil environment. Stein, J., [1987, 310p., eng] 41-3798
- Thermal simulation of subsea saline permafrost. Nixon, J.F., [1986, p.2039-2046, eng] 41-4077
- Liquid water mass fraction of snow measured by alcohol solution. Flak, D.J., [1986, p.538-541, eng] 41-4311
- Supercooled liquid water in winter orographic clouds. Henderson, T.J., [1984, p.19-24, eng] 41-4370
- Spatial and temporal variations of supercooled water during mountain storms. Rauber, R.M., et al, [1984, p.47-50, eng] 41-4371
- Pipeline frost heave predictions. Nixon, J.F., [1987, p.109-114, eng] 41-4631
- United Kingdom**
- Glaciomarine facies in northern Ireland. McCabe, A.M., [1986, p.880-894, eng] 41-1862
- Advances in ice mechanics in the United Kingdom. Hallam, S.D., et al, [1987, p.1-5, eng] 41-2930
- Meall Uaine**
- Characteristics of two Scottish avalanches. Davison, R.W., et al, [1987, p.51-54, eng] 41-3595
- Scotland**
- Supply of snow in the Eastern Highlands of Scotland: 1954-5 to 1983-4. Davison, R.W., [1987, p.42-50, eng] 41-3147
- Severn River**
- Ice-wedge casts in the Severn estuary, S.W. Britain. Allen, J.R.L., [1987, p.109-118, eng] 41-4520
- United States**
- Age of the Arctic. Young, O.R., [1985, p.160-179, eng] 41-326
- Ocean development and management in the Arctic by USA and Canada. Vanderzwaag, D.L., et al, [1986, p.327-337, eng] 41-2724
- Alaska**
- Stability study of CRREL permafrost tunnel. Huang, S.L., et al, [1986, p.777-790, eng] 41-230
- Alaska snow surveys and Federal-State-Private cooperative snow surveys, Mar. 1, Apr. 1, May 1 and June 1, 1986. Clagett, G.P., [1986, 4 issues, eng] 41-363
- Institute of Northern Engineering, 1985-1986 report. [1986, 48p., eng] 41-364
- Workshop on Alaskan Hydrology, Apr. 1985. [1986, 106p. + 3 appenda., eng] 41-471
- Effects of glaciers on runoff and runoff forecasting. Benson, C., et al, [1986, p.6-32, eng] 41-472
- Natural hazards caused by glaciers. Björnsson, H., et al, [1986, p.33-52, eng] 41-473
- Glaciers and sediment. Bezinge, A., et al, [1986, p.53-69, eng] 41-474
- Ice problems associated with rivers and reservoirs. Benson, C., et al, [1986, p.70-98, eng] 41-475
- Permafrost. Benson, C., et al, [1986, p.99-106, eng] 41-476
- Alaska's mineral industry, 1985. Bundtzen, T.K., et al, [1986, 68p., eng] 41-569
- Geologic studies in Alaska by the U.S. Geological Survey during 1985. Bartsch-Winkler, S., ed, [1986, 173p., eng] 41-664
- Bibliography of landslides in Alaska. Galloway, J.P., [1986, 54p., eng] 41-797
- Engineering surveys along the Trans-Alaska Pipeline. Godfrey, R.N., et al, [1986, 85p., eng] 41-799
- Offshore development in northern Canada and Alaska. Minion, R., comp, [1985, 83p., eng] 41-823
- Catalog of microfiche of Alaska natural resources and environment. [1986, 167p., eng] 41-965
- Arctic research in the national interest. Washburn, A.L., et al, [1986, p.633-639, eng] 41-1033
- Effect of fertilizer on production of tussock tundra, Alaska. Shaver, G.R., et al, [1986, p.261-268, eng] 41-1175
- Permafrost thermal properties in the Alaskan Arctic. Lachenbruch, A.H., et al, [1986, p.689-696, eng] 41-1254
- Alaska testlab: helping contractors avoid costly mistakes. [1984, p.36-40, eng] 41-1330
- Heat loss factors for insulated building foundations. Zarling, J.P., et al, [1986, p.465-483, eng] 41-1383
- Alaska railroad between Anchorage and Fairbanks: guidebook to permafrost and engineering problems. Fuglestad, T.C., [1986, 82p., eng] 41-1573
- NANA region environment, a summary of available information. Hale, L.Z., [1979, 14p. + plates, eng] 41-1781
- Conceptual oil dispersion modeling, lower Cook Inlet-Sheikof Strait. Schleuter, R.S., et al, [1984, p.389-469, eng] 41-1783
- Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.35. [1985, 440p., eng] 41-1784
- Outer Continental Shelf Environmental Assessment Program; Final reports of principal investigators, Vol.39. [1986, 360p., eng] 41-1785
- Winter marine transportation off Alaska. Brigham, L.W., [1986, p.805-819, eng] 41-2059
- Reproduction of *Eriophorum vaginatum* by seed in Alaskan tussock tundra. Gartner, B.L., et al, [1986, p.1-18, eng] 41-2188
- Environmental control of nutrients in Alaskan tussock tundra. Chapin, F.S., III, et al, [1986, p.167-195, eng] 41-2189
- Seasonal growth and biomass in hummocks of Alaskan tussock tundra. Shaver, G.R., et al, [1986, p.257-278, eng] 41-2190
- Impacts of increasing CO<sub>2</sub> on natural vegetation, particularly the tundra. Oechel, W.C., et al, [1986, p.36-42, eng] 41-2217
- Wellsite cleanup on the National Petroleum Reserve, Alaska. Smith, P.D.J., [1986, 49p. + append., eng] 41-2450
- Eriophorum vaginatum* annual and latitudinal growth variation. Shaver, G.R., et al, [1986, p.1524-1535, eng] 41-2480
- Environmental impact analysis process (Pt.2). Brown, V.G., [1987, Var.p., eng] 41-3009
- Performance of bituminous surface treatments in Alaska. Final report. Connor, B., [1981, 61p., eng] 41-3046
- Evaluation of road construction by surcharge over muskeg. Johnson, E.G., [1982, 13p. + append., eng] 41-3048
- Alaska snow surveys and Federal-state-private cooperative snow surveys. [1987, 3 pieces, eng] 41-3313
- Water resources of Alaska. Snyder, E.F., comp., [1987, 24p., eng] 41-3338
- Arctic National Wildlife Refuge, Alaska. [1987, 208p. + maps, eng] 41-3362
- Snow loads in Alaska. Leslie, L.D., et al, [1987, 42p., eng] 41-3423
- Mapping permafrost in the boreal forest. Morrissey, L.A., et al, [1986, p.1513-1520, eng] 41-3472
- Vegetation and terrain mapping in Alaska. Shaaby, M., et al, [1986, p.779-786, eng] 41-3847
- Use of high float emulsion asphalt in Alaska (Report to the Legislature). Connor, B., [1985, c12p., eng] 41-4001
- Life cycle costing of paved Alaskan highways. Volume 1. Kulkarni, R., et al, [1982, 76p., eng] 41-4069
- Application of geotextiles in Alaska. Johnson, E.G., [1983, 64p., eng] 41-4071
- Glacier mass balance, SE Alaska and NW British Columbia. Peltó, M.S., [1987, p.189-194, eng] 41-4456
- Alaska—Adams Inlet**
- Collapsed glacial topography at Adams Inlet, Alaska. McKenzie, G.D., et al, [1987, p.55-59, eng] 41-3596
- Alaska—Alaska Peninsula**
- Geological literature of the Alaska Peninsula to 1985. Wilson, F.H., et al, [1986, 113p., eng] 41-957
- Alaska—Anchorage**
- Airfield pavement evaluation, Anchorage, Alaska. Alexander, D.R., [1986, 36p. + figs., eng] 41-524
- Hydrologic conditions in the Klatt Bog area, Anchorage, Alaska. Glass, R.L., [1986, 19p., eng] 41-798
- Ground-water contamination at Peters Creek, Municipality of Anchorage, Alaska: ground-water occurrence and movement. Munter, J.A., [1986, 12p., eng] 41-1351
- Engineering geology of the Government Hill area, Anchorage, Alaska. Updike, R.G., et al, [1986, 32p., eng] 41-3224
- Alaska—Auke Bay**
- Reinforced earth slab to reduce embankment loads, Auke Bay, Alaska. Elias, V., et al, [1981, 21p., eng] 41-4067
- Alaska—Beechey Point**
- Vegetation of Beechey Point, Alaska. Walker, D.A., et al, [1987, 63p., eng] 41-4367
- Alaska—Brooks Range**
- Lichen growth in the central Brooks Range, Alaska. Haworth, L.A., et al, [1986, p.289-296, eng] 41-1177
- White spruce in the Brooks Range, Alaska. Cooper, D.J., [1986, p.247-252, eng] 41-1868
- Alaska—Columbia Glacier**
- Ice velocity at the terminus of Columbia Glacier, Alaska. Krimmel, R.M., et al, [1986, p.117-123, eng] 41-752
- Bed topography from radio echo soundings of Columbia Glacier, Alaska. Brown, C.S., et al, [1986, 26p., eng] 41-2119
- Behavior of Columbia Glacier, Alaska. Meier, M.F., et al, [1985, 41p. + 8 maps, eng] 41-3403
- Isotropic points on glaciers. Nye, J.F., [1986, p.363-365, eng] 41-4289
- Alaska—Colville River**
- Riverbank erosion in the Colville Delta, Alaska. Walker, J., et al, [1987, p.61-70, eng] 41-3555
- Alaska—Cook Inlet**
- Engineering analysis of beach erosion at Homer Spit, Alaska. Smith, O.P., et al, [1985, 29p. + 5 appenda., eng] 41-528
- Alaska—Copper River**
- Geologic materials from boreholes for the TACTP, Copper River, Alaska. Odum, J.K., et al, [1986, 18p., eng] 41-4106
- Alaska—Crooked Creek**
- Alluvial diamond discoveries in placer gravels, Crooked Creek, Alaska. Forbes, R.B., et al, [1987, 26p., eng] 41-2241
- Alaska—Dalton Highway**
- Pollen, vegetation and climatic relationships along the Dalton Highway, Alaska. Short, S.K., et al, [1986, p.57-72, eng] 41-1188
- Alaska—Drift Glacier**
- Effects of eruptions of Mount Redoubt on the flow of Drift Glacier, Alaska. Sturm, M., et al, [1986, p.355-362, eng] 41-4288
- Alaska—Eagle Summit**
- Environmental factors and growth of *Dryas octopetala*, Alaska. McGraw, J.B., [1985, p.229-239, eng] 41-1244
- Alaska—Fairbanks**
- Influence of surface conditions on surface temperature. Kinney, T.C., et al, [1986, p.1-15, eng] 41-640
- Plant production and distribution in Alaskan tundra. Fox, J.F., [1985, p.199-204, eng] 41-1230
- Preparation of geophysical borehole site with ground ice, Fairbanks, AK. Delaney, A.J., [1987, 15p., eng] 41-3627
- Comparison of leaf and canopy reflectance of subarctic forests. Kodama, Y., et al, [1986, p.809-811, eng] 41-3848
- Alaska—Glacier Bay**
- Observed processes of glacial deposition in Glacier Bay, Alaska. Anderson, P.J., ed, [1986, 167p., eng] 41-2974
- Alaska—Gulf of Alaska**
- Quantitative study of slope instability in the Gulf of Alaska. Hampton, M.A., et al, [1978, p.2307-2318, eng] 41-2127
- Alaska—Harrison Bay**
- Newly formed ice gouges in Harrison Bay, Alaska. Reaie, D.M., [1986, 52p., eng] 41-4107
- Alaska—Hubbard Glacier**
- Velocity and altitude of Hubbard Glacier, Alaska, Aug. 1978. Krimmel, R.M., et al, [1986, 13p., eng] 41-3227
- Alaska—North Slope**
- Balsam poplar in northern Alaska. Edwards, M.E., et al, [1985, p.271-277, eng] 41-1248
- Bibliography and analytical data on North Slope. [1979, 60p., eng] 41-2193
- Alaska—Onion Portage**
- Northern regions cryoturbation, Onion Portage, Alaska. Schweger, C., [1985, p.127-141, eng] 41-1358
- Alaska—Peard Bay**
- Random transport of oil by sea ice. Colony, R., [1986, p.25-39, eng] 41-342
- Alaska—Prudhoe Bay**
- Random transport of oil by sea ice. Colony, R., [1986, p.25-39, eng] 41-342
- Transportation of heavy modules to the Arctic. Kirkeide, K.L., et al, [1986, p.1160-1168, eng] 41-1151
- Pingos of the Prudhoe Bay region, Alaska. Walker, D.A., et al, [1985, p.321-336, eng] 41-1251
- Impact of oilfield development on shorebirds, Prudhoe Bay, Alaska. Meehan, R.H., [1986, 92p., eng] 41-2287
- Use of map parameters to examine cumulative impacts in Prudhoe Bay Oilfield. Walker, D.A., et al, [1986, p.149-160, eng] 41-4139
- Micropaleontology and sedimentology of Prudhoe Bay. McDougall, K., et al, [1986, 62p. + 14 plates, eng] 41-4600
- Alaska—Roise Creek**
- Early results of the Roise Creek Fire Research Project 1984. Juday, G.P., ed, [1985, 46p., eng] 41-570
- Alaska—Russell Lake**
- Water from glacier-dammed Russell Lake, Alaska. Seitz, H.R., et al, [1986, 10p., eng] 41-3303
- Alaska—Sagavanirktok River**
- Features of the Sagavanirktok River, Alaska. Hodel, K.L., [1986, 28p., eng] 41-1895
- Alaska—Seward Highway**
- Snow avalanche atlas, Seward Highway, south-central Alaska. March, G.D., et al, [1982, 168p., eng] 41-560
- Alaska—Sukpak Mountain**
- Growth mechanisms in aggradation palsas. Outcalt, S.I., et al, [1984, p.65-78, eng] 41-626
- Alaska—Susitna River**
- Sediment transport in the Susitna River basin, Alaska, 1983-1984. Knott, J.M., et al, [1986, 73p., eng] 41-4323
- Alaska—Tanana River**
- On the Yukon and Tanana: river trip was "no picnic". Staley, C., [1985, p.8-9, eng] 41-1837
- Morphology, hydraulics and sediment transport of an ice-covered river. Lawson, D.E., et al, [1986, 37p., eng] 41-2612

## United States (cont.)

## —Alaska—Valdez

- Effect of crude oil on tidal-flat ecosystem in Port Valdez, Alaska. Naidu, A.S., et al, [1978, p.97-104, eng] 41-2121

## —Alaska—Variegated Glacier

- Strain anomalies during surges of Variegated Glacier, Alaska. Raymond, C.F., et al, [1986, p.178-191, eng] 41-677
- Water discharge during surges of Variegated Glacier, Alaska. Humphrey, N., et al, [1986, p.195-207, eng] 41-679

## Motion events on Variegated Glacier, Alaska. Harrison, W.D., et al, [1986, p.82-89, eng] 41-744

## Accelerated motion in a glacier approaching surge. Kamb, B., et al, [1987, p.27-46, eng] 41-3593

## —Alaska—Wrangell Mountains

- Photogrammetry study of volcano-glacier interactions, Mount Wrangell, Alaska. Benson, C.S., et al, [1986, p.813-827, eng] 41-2742

## —Alaska—Wright Glacier

- Wright Glacier volcanic plug and dike swarm, southeastern Alaska. Ford, A.B., et al, [1987, p.116-118, eng] 41-3467

## —Alaska—Yukon River

- On the Yukon and Tanana: river trip was "no picnic". Staley, C., [1985, p.8-9, eng] 41-1837

## —California

- Geographic winter storm structure in California. Marwitz, J.D., [1984, p.315-316, eng] 41-4493

## —California—San Bernardino Mountains

- Snow levels and amounts in the mountains of southern California. Minnich, R.A., [1986, p.37-58, eng] 41-2699

## —California—Sierra Nevada

- Predicting forest snow water equivalent. Bergman, J.A., [1985, p.154-162, eng] 41-449
- Forest harvest, snowmelt and streamflow in the central Sierra Nevada. MacDonald, L.H., [1987, p.273-283, eng] 41-4317

## —Colorado

- Daily flow model of watersheds with snowmelt runoff, Colorado. Norris, J.M., et al, [1985, 32p., eng] 41-3305
- Satellite data input to Windy Gap computerized streamflow forecasting model. Eckhardt, J.R., et al, [1986, p.349-354, eng] 41-3905

## —Colorado—Front Range

- Bibliography of alpine and subalpine areas of the Front Range, Colorado. Halfpenny, J.C., comp, [1986, 114p., eng] 41-697
- Alpine tundra soil microbiology, Front range, CO. Mancinelli, R.L., [1986, p.269-275, eng] 41-1176

- Arapaho rock glacier, Front Range, Colorado, U.S.A.: a 25-year resurvey. Benedict, J.B., et al, [1986, p.349-352, eng] 41-1182
- Stratified alpine tundra for geomorphic studies. Frank, T.D., et al, [1985, p.179-187, eng] 41-1228

- Phytodermic relationships in alpine tundra, Colorado. Eddleman, L.E., et al, [1984, p.343-359, eng] 41-1235

## —Colorado—Mount Mestas

- Statistical interpretation of the fabric of a rock glacier. Giardino, J.R., et al, [1985, p.165-177, eng] 41-1227
- Tree-ring analysis of movement of a rock glacier, Mount Mestas, CO. Giardino, J.R., et al, [1984, p.299-309, eng] 41-1232

## —Colorado—Niwot Ridge

- Particle size distribution in patterned ground, Niwot Ridge, Colorado. Rissing, J.M., et al, [1985, p.153-163, eng] 41-1226

## —Colorado—Rocky Mountains

- Cloud riming regions for snow crystals that impact mountain tops in the Colorado Rockies. Hindman, E.E., [1984, p.67-70, eng] 41-4373

## —Colorado—Vail

- Avalanches and countermeasures, Vail, Colorado. Oaks, S.D., et al, [1987, p.157-168, eng] 41-4127

## —Hawaii

- Melting glaciers pull the plug on volcanoes. Anderson, I., [1987, p.30, eng] 41-2365

## —Idaho

- Ground snow loads for Idaho. Sack, R.L., et al, [1984, p.59-63, eng] 41-1947
- Storm precipitation and snowmelt temperature, Clearwater River, Idaho. Schwarz, F.K., [1986, 146p., eng] 41-2215

## —Idaho—Lemhi Mountains

- Pinedale glaciation and Holocene environmental changes, Lemhi Mountains. Butler, D.R., [1986, p.39-46, eng] 41-2705

## —Maine—Portland

- Description of the building materials data base for Portland, Maine. Merry, C.J., et al, [1986, 83p., eng] 41-662

## —Massachusetts—Buzzards Bay

- Behavior of the Bouchard No.65 oil spill in the ice-covered waters of Buzzards Bay. Deslauriers, P.C., et al, [1978, p.267-276, eng] 41-2124

## —Michigan

- Wintertime wet and dry deposition in northern Michigan. Cadle, S.H., et al, [1986, p.1171-1178, eng] 41-796
- Glacial history of NE Wisconsin and Upper Michigan. Peterson, W.L., [1986, 14p., eng] 41-974

## —Michigan, Lake

- 72-year Lake Michigan region snow climatology. Dungey, M.J., et al, [1982, p.45-48, eng] 41-2
- Midwest snow storm of 8-11 December 1977. Braham, R.R., Jr., [1983, p.253-272, eng] 41-3376
- Air flow over Lake Michigan and lake-affected snow event. Hjelmfelt, M.R., et al, [1982, p.228-235, eng] 41-3377

## —Missouri—St. Louis

- Precipitation in the cold season, St. Louis, MO. Huff, F.A., et al, [1986, p.1887-1907, eng] 41-4056

## —Montana—Bridger Mountain Range

- Winter cloud seeding in Bridger Mountain Range, Montana. Super, A.B., [1986, p.1926-1933, eng] 41-4057

## —Montana—Glacier National Park

- Meteorology and climatology of snow avalanches in Montana. Butler, D.R., [1986, p.72-87, eng] 41-73
- Climatic handbook for Glacier National Park. Finklin, A.I., [1986, 124p., eng] 41-2183
- History of high-magnitude snow avalanches, southern Glacier National Park, Montana, U.S.A. Butler, D.R., et al, [1985, p.175-182, eng] 41-3969

## —Montana—Grasshopper Glacier

- Recession of Grasshopper Glacier, Montana since 1898. Ferrigno, J.G., [1986, p.65-68, eng] 41-740

## —Montana—Marion Pass

- Deglaciation of the mountainous region of NW Montana. Carrara, P.E., et al, [1986, p.317-325, eng] 41-1179

## —New Hampshire

- Aerial survey of a salt marsh: ice rafting to the lower intertidal zone. Hardwick-Witman, M.N., [1986, p.379-383, eng] 41-2244
- Nitrogen of a moss ecosystem on glacial outwash sands, New Hampshire. Bowden, R.D., [1987, 149p., eng] 41-3346

## —New Hampshire—Hanover

- Chemical properties of snow in the northeastern United States. Kumai, M., [1987, p.(C1)625-(C1)630, eng] 41-3959

## —New York

- Spatial and temporal snowcover distribution. Allen, R.V., et al, [1984, p.199-203, eng] 41-1960
- D/H ratios of snow and ground water in eastern New York State. Lawrence, J.R., [1987, p.519-521, eng] 41-3310

## —New York—Adirondack Mountains

- Snowmelt solutes in Adirondack region of New York. Rascher, C.M., et al, [1987, p.209-224, eng] 41-3404

## —Ohio—Erie, Lake

- Ice motion in Lake Erie. Campbell, J.E., et al, [1987, 22p., eng] 41-4577

## —Oregon

- Effects of clearcutting on rain-snow runoff in western Oregon. Harr, R.D., [1986, p.1095-1100, eng] 41-72

## —Oregon—Cascade Range

- Snow accumulation and melt during rainfall in forest land, Oregon. Berris, S.N., et al, [1987, p.135-142, eng] 41-2465

## —Rocky Mountains

- Floristic patterns on avalanche paths in the northern Rocky Mountains, USA. Manalson, G.P., et al, [1986, p.231-238, eng] 41-1257

## —Tennessee

- Regionalization of winter low-flow characteristics of Tennessee streams. Bingham, R.H., [1986, 88p. + 2 maps, eng] 41-2137

## —Washington—Blue Glacier

- Ice divide at Blue Glacier, U.S.A. Waddington, E.D., et al, [1986, p.175-176, eng] 41-764

## —Washington—Cascade Range

- Formation of ice-marginal embankments into ice-dammed lakes, Pleistocene. Booth, D.B., [1986, p.247-263, eng] 41-563

## —Washington—Mount Saint Helens

- Mountain collapse and rock sliding from Mount Saint Helens. Kronfellner-Kraus, G., [1985, p.227-232, ger] 41-719

## Glacier volume estimation on Cascade volcanoes. Driedger, C., et al, [1986, p.59-64, eng] 41-739

## —Washington—Puget Lowland

- Mass balance and sliding velocity of the Puget lobe, Cordilleran ice sheet. Booth, D.B., [1986, p.269-280, eng] 41-1189

## —Wisconsin

- Glacial history of NE Wisconsin and Upper Michigan. Peterson, W.L., [1986, 14p., eng] 41-974

## Upwelling

- Upwelling at the ice edge: a mechanism for deep water formation. Häkkinen, S., [1987, p.5031-5034, eng] 41-3344
- Analytical model for ice-edge upwelling. Van Heijst, G.J.F., [1984, p.155-177, eng] 41-3790

## Urban planning

- Some aspects of economic development of northern regions. Loginov, V.G., [1985, p.15-21, rus] 41-205
- Theoretical basis for planning northern cities. Panov, L.K., [1986, p.146-154, rus] 41-1206
- Geocryological mapping for regional surveying and design research. Garagulia, L.S., et al, [1986, p.38-45, rus] 41-2084

- Natural environments and residential areas of towns (allowing for natural conditions when planning new residential areas). [1986, 126p., rus] 41-2213

- Improving the design of railroad routes. Turbinin, I.V., ed, [1984, 106p., rus] 41-2453

- Planning the distribution of settlements when designing railroads for little-explored regions. Bykov, I.U.A., et al, [1984, p.34-41, rus] 41-2454

- Thermally insulated pipes for construction of industrial overground engineering nets. Rublev, V.A., et al, [1986, p.28-29, rus] 41-2781

- Heating, ventilation and thermal insulation systems of railroad buildings and structures. Listov, A.M., ed, [1986, 81p., rus] 41-2916

- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, [1986, p.36-41, rus] 41-2918

- Urban planning and construction problems in Siberia. Krushinskii, V.L., [1986, p.40-45, rus] 41-3259

- Regional characteristics of urban planning and construction in Siberia and the North. Alekseeva, T.I., [1987, 208p., rus] 41-3804

## Urea

- Urea compound, shotted. [1979, 7p., eng] 41-1759

- Urea compound, powder. [1979, 7p., eng] 41-1760

- Effects of freezing temperature on the flexural properties of urea ice. Hara, Y., et al, [1986, p.31-37, jpn] 41-3781

## Urethane foam

See: Cellular plastics

## USSR

- USSR energy atlas. [1985, 79p., eng] 41-480

- Age of the Arctic. Young, O.R., [1985, p.160-179, eng] 41-526

## —Altai Mountains

- Soviet Glacier Inventory and present glaciation of the Akkem Valley (Altai, Southern Siberia). Smiraglia, C., [1985, p.196-204, ita] 41-3187

## —Amur River

- Differentiations of seasonally and perennially frozen rocks in Severnoe Priamur'e. Pozdniakov, I.V., [1986, p.96-106, rus] 41-3490

## —Angara River

- Peculiarities of water balance structure in different landscapes of Priangar'e. Berkin, N.S., et al, [1985, p.187-193, rus] 41-1375

- Biologic activities in deeply freezing taiga soils. Popova, E.P., [1985, p.47-54, rus] 41-4111

## —Baykal Lake

- Content of mercury in the snow cover of Pribaykal'e. Postovin, A.L., et al, [1987, p.56-60, rus] 41-3946

## —Caucasus

- Change of vegetation near the timber-line. Armand, A.D., [1985, p.59-62, eng] 41-373

- Distribution regularities of mudflow foci in the Chechen-Ingush ASSR. Streshneva, N.P., [1985, p.46-58, rus] 41-844

- Problems of geography, origin and classification of soils. Fridland, V.M., [1986, 243p., rus] 41-2289

## —Charykaya Basin

- Development and regime of thermal erosion in the BAM zone. Poznanin, V.L., [1986, p.138-142, rus] 41-2831

- Waters in active layers and naled formation. Poznanin, V.L., [1986, p.142-147, rus] 41-2832

## —Chukotskiy Peninsula

- Digital processing of radar images obtained from the satellite "Kosmos-1500". Asmus, V.V., et al, [1986, p.37-57, rus] 41-2716

## —Irtysh River

- Allowing for physiographic factors in estimating maximum river runoff for the swampy forest zone of Priirtysh'e. Trofimova, E.V., [1986, p.143-147, rus] 41-1372

## —Kara Sea

- Shore processes in the coastal zone of western Yamal. Smirnov, V.M., [1986, p.425-428, rus] 41-887

- Methods of determining atmospheric and oceanic parameters from satellite data. Burtsev, A.I., ed, [1986, 160p., rus] 41-2714

- Digital processing of radar images obtained from the satellite "Kosmos-1500". Asmus, V.V., et al, [1986, p.37-57, rus] 41-2716

- Coastal processes along the west coast of Yamal. Smirnov, V.M., [1986, p.317-321, eng] 41-3623

## —Khibiny Mountains

- Biophyta in the Polar-Alpine Botanical Garden. Konstantinova, N.A., et al, [1986, p.8-12, rus] 41-2776

## —Kola Peninsula

- Tidal power plants. Bernshteyn, L.B., et al, [1987, 296p. (Pertinent p.239-273), rus] 41-3675



- Kolyma River**  
SA-15 ships for ice navigation in northern rivers. Varakain, K.N., et al, [1985, p.54-56, rus] 41-490
- Kotuy River**  
Maximum southward advance of the Kara center ice sheet. Diatlova, I.I., [1986, p.154-157, rus] 41-125
- Kaznetchk Basin**  
Humus formation in ecosystems affected by industrial activities. Kovalev, R.V., ed, [1986, 165p., rus] 41-2912
- Magadan**  
Environmental impact on motor vehicle transport in the North. Belinskii, B.V., [1986, p.168-169, rus] 41-3978
- Ob' River**  
Long-range forecasting of ice conditions on rivers. Eremin, V.V., [1986, p.71-81, rus] 41-1966  
Using satellites in mapping West Siberian forests. Gorozhankina, S.M., et al, [1986, p.34-43, rus] 41-3515  
Landscape conditions, hydrology and hydrochemistry of lakes in Central Priob'e. Tiul'kova, L.A., [1986, p.64-66, rus] 41-3977  
Ice rafting of clastic material. Borsuk, O.A., [1985, p.51-54, rus] 41-4561
- Pamir-Alai**  
Mapping of territories with unstable snow covers. Solodkov, P.A., et al, [1986, p.82-84, rus] 41-1687
- Siberia**  
Change of vegetation near the timber-line. Armand, A.D., [1985, p.59-62, eng] 41-373  
Road construction in Western Siberia. Segerkrantz, V., [1984, p.408-411, fin] 41-1939
- Sikhote Alin**  
Lichens in fir-spruce forests of Sikhote Alin Mountains. Skirina, I.F., et al, [1986, p.111-112, rus] 41-2779
- Taymyr Peninsula**  
Southern tundras of Taymyr. Chernov, I.U.I., ed, [1986, 208p., rus] 41-1331  
Possible routes of pollution transport to the Arctic. Krasovskaya, T.M., [1986, p.93-96, rus] 41-1645
- Taz River**  
Flora of overgrown gullies. Shishkina, L.P., [1986, p.67-70, rus] 41-1165
- Turkey Alatau**  
Compiling dendroclimatograms for distinguishing glaciation conditions. Solomina, O.N., [1986, p.106-112, rus] 41-1648
- Tien Shan**  
Mapping of territories with unstable snow covers. Solodkov, P.A., et al, [1986, p.82-84, rus] 41-1687  
Hydrometeorological regime and dynamics of Lake Issyk-Kul'. Pomortsev, O.A., ed, [1988, 153p., rus] 41-3870
- Transbaikalia**  
Thermal and moisture regimes of clay soils in aeration zones of construction sites in the Far East and the prevention of flooding. Fedorov, V.I., [1985, p.93-104, rus] 41-1364  
Heat transfer between concrete power line supports and permafrost. Tsukanov, N.A., et al, [1985, p.21-32, rus] 41-1543
- Ural Mountains**  
Hydrological role of the Bilimbayev forests. Mironov, B.A., [1986, p.73-88, rus] 41-2876
- White Sea**  
Climatic cycles as reflected in ice conditions of northern seas. Girdiuk, G.V., et al, [1986, p.122-127, rus] 41-119  
Ice on northern seas and wind in equatorial stratosphere. Sheremet'evskaya, O.I., [1986, p.128-131, rus] 41-120
- Yakutia**  
Calculating river runoff in arid and humid cold regions. Plitkin, G.A., et al, [1986, p.122-130, rus] 41-815  
Alaasy as indicators of soil moisture. Boikov, N.P., [1986, p.80-85, rus] 41-1370  
Classifying northern areas according to fitness for mass construction. Nistratova, T.A., [1986, p.200-206, rus] 41-2101  
Environmental impact on motor vehicle transport in the North. Belinskii, B.V., [1986, p.168-169, rus] 41-3978
- Yenisey River**  
Scheme for predicting flood runoff for unstudied rivers of Eastern Siberia. Petenkov, A.V., [1986, p.37-45, rus] 41-599  
Basic structures of the Kureyskaya hydroelectric plant. Makarov, V.A., et al, [1986, p.11-17, rus] 41-2863  
Using satellites in mapping West Siberian forests. Gorozhankina, S.M., et al, [1986, p.34-43, rus] 41-3515
- Zailiyskiy Alatau**  
Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] 41-3742
- Vacuum freezing**  
Vacuum freezing with multiple phase transformations. Cheng, C.-Y., et al, [1983, 14 col., eng] 41-1674
- Valleys**  
Comparing mass-balance components of valley glaciers in temperate latitudes. Menshutina, V.M., [1986, p.112-116, 229-233, eng] 41-1064  
Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al, [1986, p.72-80, rus] 41-2250  
Differentiations of seasonally and perennially frozen rocks in Severnoe Priamur'e. Pozdniakov, I.V., [1986, p.96-106, rus] 41-3490
- Vapor**  
See: Water vapor
- Vapor diffusion**  
Transport of water in frozen soil 6. Effects of temperature. Nakano, Y., et al, [1987, p.44-50, eng] 41-3019  
Outward flux of vapour from frozen soils at Mayo, Yukon, Canada: results and interpretation. Smith, M.W., et al, [1987, p.143-152, eng] 41-4491
- Vapor transfer**  
Simple model of stratified precipitation for scavenging studies. Molenkamp, C.R., [1982, p.63-65, eng] 41-5  
Free energies of crystal-vapor systems. Broughton, J.Q., et al, [1986, p.5741-5748, eng] 41-497
- Variations**  
Large-scale short-period sea ice atmosphere interaction. Cahalan, R.F., et al, [1986, p.10,709-10,717, eng] 41-1010  
See also: Periodic variations; Seasonal variations; Temperature variations
- Vegetation**  
Accumulation of airborne trace pollutants by arctic plants and soil. Thomas, W., [1986, p.47-57, eng] 41-344  
Biogeographic evolution of a moraine sector in Svalbard. Brossard, T., [1985, p.33-46, fre] 41-371  
Vegetation of a high Arctic tundra, Svalbard. Nimis, P.L., [1985, p.47-58, eng] 41-372  
Change of vegetation near the timber-line. Armand, A.D., [1985, p.59-62, eng] 41-373  
Restoration and vegetation succession in circumpolar lands. [1986, 25p., eng] 41-561  
Bibliography of alpine and subalpine areas of the Front Range, Colorado. Halfpenny, J.C., comp, [1986, 114p., eng] 41-697  
Effect of snow-cover blasting on erosion. Bunza, G., et al, [1984, p.181-190, ger] 41-713  
Arctic science conference, 1986. [1986, 55p., eng] 41-830  
The living Earth. Agriculture and natural resources. Ushakov, S.A., et al, [1986, 167p., rus] 41-1163  
Reaction of tundra vegetation to petroleum pollution induced by drilling. Gnat, L.V., [1986, p.82-93, rus] 41-1171  
Response of permafrost to disturbance. Lawson, D.E., [1986, p.1-7, eng] 41-1183  
Pollen, vegetation and climatic relationships along the Dalton Highway, Alaska. Short, S.K., et al, [1986, p.57-72, eng] 41-1188  
Stratifying alpine tundra for geomorphic studies. Frank, T.D., et al, [1985, p.179-187, eng] 41-1228  
Phytomass of Venezuelan paramo vegetation. Smith, J.M.B., et al, [1985, p.189-198, eng] 41-1229  
Plant production and distribution in Alaskan tundra. Fox, J.F., [1985, p.199-204, eng] 41-1230  
Carbon balance of arctic tundra. Peterson, K.M., et al, [1984, p.331-335, eng] 41-1234  
Phytoedaphic relationships in alpine tundra, Colorado. Edelman, L.E., et al, [1984, p.343-359, eng] 41-1235  
Plant ecology at the alpine timberline, New Zealand. Norton, D.A., et al, [1984, p.361-370, eng] 41-1236  
Turf-banked terraces in the Olympic Mountains, Washington, U.S.A. Hansen-Bristow, K.J., et al, [1985, p.261-270, eng] 41-1247  
Floristic patterns on avalanche paths in the northern Rocky Mountains, USA. Manolson, G.P., et al, [1986, p.231-238, eng] 41-1257  
Forms of vascular plants in the southern tundra subzone of Taymyr. Polozova, T.G., [1986, p.122-134, rus] 41-1337  
Natural water bodies as indicators of landscapes. Aseev, V.V., et al, [1986, p.75-80, rus] 41-1369  
Compiling dendroclimatograms for distinguishing glaciation conditions. Solomina, O.N., [1986, p.106-112, rus] 41-1648  
Primary successions of Arctic tundras on the west coast of Spitzbergen (Svalbard). Tishkov, A.A., [1986, p.99-105, rus] 41-1820  
Biological productivity of soil and plant formations in the USSR. Bazilevich, N.I., [1986, p.49-67, rus] 41-1822  
Influence of frost-heaving on soil chemistry and vegetation. Jonasson, S., [1986, p.185-195, eng] 41-1877  
Forest ecosystems in the Alaskan taiga. Van Cleave, K., ed, [1986, 230p., eng] 41-1898  
Woody plants of mountain valleys in Polar Ural Mountains. Nepomilueva, N.I., et al, [1986, p.72-80, rus] 41-2250  
Studies on the residual effects of de-icing salts. Kutter, M., et al, [1986, p.5-12, ger] 41-2325
- Primary succession in Arctic tundra on the west coast of Spitzbergen (Svalbard). Tishkov, A.A., [1986, p.148-156, eng] 41-2341
- Arctic flora of the USSR. Critical review of vascular plants in Arctic regions of the USSR. Volume 9. Families Droseraceae—Leguminosae. Part 2. Family Leguminosae. Korobkov, A.A., et al, [1986, 188p., rus] 41-2361
- Tundra plant responses on the National Petroleum Reserve, Alaska. McKendrick, J.D., [1986, 225p., eng] 41-2452
- Liverwort mosses of the Matuiyakhka river (Yamal Peninsula). Zhukova, A.L., et al, [1986, p.642-649, rus] 41-2561
- Arctic Heritage Symposium, Banff, Alta., 1985. [1987, 653p., eng] 41-3232
- Floral processes. Wielgolaski, F.E., [1987, p.80-94, eng] 41-3235
- Hydrothermal regime of taiga and tundra soils of northeastern Europe. Kononenko, A.V., [1986, 145p., + inserts, rus] 41-3246
- Scientific-technological progress and the development of northern natural resources. Chistobaev, A.I., et al, [1985, p.42-51, rus] 41-3435
- Snow depth and incidence of a snowmold disease on mountain big sagebrush. Sturges, D.L., et al, [1986, p.215-221, eng] 41-3571
- Science and public policy: program and abstracts of the conference. [1984, 251p., eng] 41-3615
- Vegetation of the Angmagssalik District, SE Greenland. Daniels, F.J.A., [1982, 78p., + maps, eng] 41-3789
- Vegetation and terrain mapping in Alaska. Shasby, M., et al, [1986, p.779-786, eng] 41-3847
- Lacustrine and river ecosystems of the Oktyabr'skaya Revolyutsiya Islands (Severnaya Zemlya). Mordvinov, A.A., [1986, p.30-41, rus] 41-3864
- Vegetation of Mabel and Guker islands (Franz Josef Land archipelago). Safronova, I.N., [1986, p.51-63, rus] 41-3866
- All-Union Conference on nuclear-physical methods of environmental management, 3rd, Tomsk, May 21-23, 1985. Proceedings. [1987, 172p., rus] 41-3944
- Dangerous glacial slope processes in mountain ecosystems of Siberia. Laptev, M.N., et al, [1986, p.63-65, rus] 41-4065
- Vegetation of Beechey Point, Alaska. Walker, D.A., et al, [1987, 63p., eng] 41-4367
- Influence of industrial wastes on vegetation of northern forest ecosystems. Egorova, V.N., et al, [1987, p.143-147, rus] 41-4870
- See also specific types of vegetation
- Vegetation factors**  
Maps of technogenic thermokarst development potential. Parmuzin, S.I.U., et al, [1986, p.184-193, eng] 41-3198  
Changes in the active layer with changes in forest cover in Yakutia. Stashenko, A.I., [1986, p.194-199, eng] 41-3199  
Hydromeliorative regionalization of West Siberia from space photographs. Gorozhankina, S.M., [1984, p.16-25, rus] 41-4087  
Soil climate in southeastern West Siberia. Az'muka, T.I., et al, [1984, p.26-31, rus] 41-4088  
Thermal regime of upper soil layers in the Kolyma Basin. Alfimov, A.V., [1985, p.9-29, rus] 41-4119
- Vegetation patterns**  
Climate and vegetation of Primor'e as affected by Pleistocene glaciation. Shumova, G.M., et al, [1986, p.157-161, rus] 41-126  
Biocenotic structure of forests in different landscapes of central taiga. Volkov, A.D., et al, [1985, p.16-38, rus] 41-191  
Subdivision of the Bam zone according to vegetational cover. Belov, A.V., ed, [1985, 181p., rus] 41-252  
Vegetation of southern tundras in western Taymyr Peninsula. Matveeva, N.V., et al, [1986, p.5-67, rus] 41-1332  
Soil algae in southern tundras of Taymyr. Sdobnikova, N.V., [1986, p.68-79, rus] 41-1333  
Plant distribution in nival communities of the Chukotskiy Peninsula. Razzhivin, V.I.U., [1986, p.1088-1097, rus] 41-1456  
Studies of horizontal composition of marginal vegetation in the Salair taiga. Kirikova, L.A., et al, [1986, p.22-28, rus] 41-2600  
Lichens in fir-spruce forests of Sikhote Alin Mountains. Skirina, I.F., et al, [1986, p.111-112, rus] 41-2779
- Vehicle wheels**  
Vehicular transport at McMurdo. Dibbern, J.S., [1986, 31p., eng] 41-638  
Trafficability of snow cover by wheeled vehicles from experimental data. Ioffe, D.I.A., et al, [1986, p.146-153, rus] 41-2168  
Silvicultural and ecologic consequences of felling in Karelian forests. Zibchenko, S.S., ed, [1986, 198p., rus] 41-2373  
Changes in soil microflora induced by lumbering equipment in clear-cut areas. Zagural'skaya, L.M., [1986, p.79-91, rus] 41-2377  
Impact of wheeled vehicles on trees and soil cover during forest thinning in Karelia. D'iaconov, V.V., et al, [1986, p.137-146, rus] 41-2379

**Vehicle wheels (cont.)**

- March under arctic conditions. Makarov, V., [1986, p.74-76, rus] 41-3932

**Vehicles**

- Designing for automotive corrosion prevention. [1978, 132p., eng] 41-377
- Winter maintenance practice and research in Ontario. Fromm, H.J., [1978, p.1-4, eng] 41-378
- Chemistry of the automotive environment. Baboian, R., [1978, p.14-23, eng] 41-380
- Salting practices—trends and issues. Swets, D.H., [1978, p.128-132, eng] 41-381
- Antilock brake systems in winter driving, Sweden and Norway. Nordström, O., [1986, 46p. + append., swe] 41-572
- Electric heater-blower apparatus for removing frost and snow from vehicle windows. Stephens, W.S., III, [1982, 6 col., eng] 41-1996
- Air/ground transportation in Antarctic logistics support. Baker, M.J., et al, [1986, p.376-419, eng] 41-2037
- Sea ice operation: McMurdo Sound-Granite Harbour. Pyne, A.R., [1986, p.5-13, eng] 41-2870
- Effect of oscillatory loads on the bearing capacity of floating ice covers. Kerr, A.D., et al, [1987, p.219-224, eng] 41-3032
- Improving low temperature startability of M113 vehicles: automatic engine cycling tests. Shankha, V.S., et al, [1987, 23p. + append., eng] 41-3813
- Effect of snow on vehicle-generated seismic signatures. Albert, D.G., [1987, p.881-887, eng] 41-3887
- Snow emergency: vehicles occasionally equipped with a snow removal blade. Battistoni, R., et al, [1987, p.21-25, ita] 41-4102
- Cold regions operation of diesel vehicles. Stupich, T.F., [1987, 45p. + append., eng] 41-4637
- See also specific types of vehicles*

**Velm ice**

*See: Ice veins*

**Velocity**

- Floating ice roads and runways: critical speed phenomena. Hinchey, M.J., [1986, p.139-147, eng] 41-176
- On the deterioration of a grounded iceberg. Venkatesh, S., [1986, p.161-167, eng] 41-675
- Safe speeds for navigation in ice. Tunik, A.L., [1986, p.1106-1124, eng] 41-1148
- Accelerated motion in a glacier approaching surge. Kamb, B., et al, [1987, p.27-46, eng] 41-3593
- Ice flow velocity at Lewis Glacier, East Africa. Hastenrath, S., [1987, p.79-82, eng] 41-3600
- See also: Seismic velocity; Wind velocity*

**Velocity measurement**

- Surface velocity determination on large polar icebergs: aerial photogrammetry. Brecher, H.H., [1986, p.22-26, eng] 41-412
- Methods of measuring avalanche velocity using laser range finders. Urumbaev, N.A., et al, [1985, p.15-22, rus] 41-839
- Improving Doppler radio logs installed on ice navigating ships. Cherniavets, V.V., et al, [1987, p.26-27, rus] 41-2209
- Measurement of the speed of sound in ice. Smith, A.C., et al, [1986, p.1713-1715, eng] 41-3071
- Unconfined ice-shelf flow. Morland, L.W., [1987, p.99-116, eng] 41-3276
- Plane and radial ice-shelf flow with prescribed temperature profile. Morland, L.W., et al, [1987, p.117-140, eng] 41-3277
- Glaciogeophysical survey of the interior Ross Embayment. Bentley, C.R., et al, [1987, p.181-184, eng] 41-3280
- On the flow within the transition zone between ice sheet and ice shelf. Herterich, K., [1987, p.185-202, eng] 41-3281
- Finite-element method applied to a time-dependent flowband model. Fastook, J.L., [1987, p.203-221, eng] 41-3282
- Longitudinal stresses and basal sliding: a comparative study. Van der Veen, C.J., [1987, p.223-248, eng] 41-3283
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] 41-3286

**Venezuela****—Andes**

- Phytomass of Venezuelan paramo vegetation. Smith, J.M.B., et al, [1985, p.189-198, eng] 41-1229

**Ventilation**

- State of permafrost mined by the express method. Umantsev, R.F., [1985, p.52-54, rus] 41-1018
- Thermal performance of the building envelope. Tabunshchikov, I.U.A., et al, [1986, 400p., rus] 41-1749
- Theoretical and application problems concerning air exchange in deep quarries (Summaries of reports presented at the All-Union conference held in Aptaty, Sep. 23-25, 1985). Vasserman, A.D., ed, [1985, 178p., rus] 41-2769
- Specifics of natural air supply in Khubiny quarries. Ivanova, L.I., [1985, p.51-53, rus] 41-2770
- Using subpermafrost ground water in normalizing the air in the Mir pipe quarry. Prudnikov, V.K., [1985, p.144-145, rus] 41-2772

- Dust control in coal quarries at subzero temperatures. Kupin, A.N., et al, [1985, p.153-154, rus] 41-2774

- Exhaust fans for a cold climate. Eakes, J., [1986, p.21-22, eng] 41-2966

- Concrete foundations on permafrost. Mangus, A.R., [1987, p.40-42, eng] 41-3783

- Vents and vapor retarders for roofs. Tobiasson, W., [1986, 11p., eng] 41-4575

- Very low frequencies**

- Glacial ice profiling using VLF measurements. Thiel, D.V., [1986, p.376-382, eng] 41-4292

**Vessels**

*See: Ships*

**Viability**

*See: Cold weather survival*

**Vibration**

- Ice force oscillator model for dynamic ice-structure interaction analysis. Xu, J., et al, [1986, p.391-196, eng] 41-1606

- Ten years of ice-induced vibration isolation in lighthouses. Maattinen, M., [1987, p.261-266, eng] 41-2430

- Composition and behavior of sand-clay soils under vibration. Ostrovskaia, O.V., [1986, p.108-111, rus] 41-2542

- Relationship of composition and behavior of sandy-clay soils upon vibration. Ostrovskaia, O.V., [1986, p.112-115, eng] 41-3018

- Noise and vibration of motorships in thick ice cover. Zinchenko, V.I., et al, [1986, p.48-63, rus] 41-3390

- Viscoelastic materials**

- Deformation of snow and ice at German antarctic stations. Dörr, R., [1984, 124p., ger] 41-1272

- Viscoelasticity**

- Viscoelasticity of floating ice plates under loads. Hui, D., [1986, p.135-143, eng] 41-1212

- Time and temperature effects in the performance of drilling ice platforms. Vinogradov, A.M., [1986, p.397-405, eng] 41-1607

- Viscoelastic approach to the ice load evaluation. Kajaste-Rudnitski, J., et al, [1986, p.407-420, eng] 41-1608

- Viscoelasticity of flooded and spray ice using flatjacks. Spencer, P.A., et al, [1987, p.17-23, eng] 41-2397

- Viscoelasticity of ice under different loading conditions. Hamza, H., [1987, p.151-157, eng] 41-2416

- Effective poisson's ratio of isotropic ice. Sinha, N.K., [1987, p.189-195, eng] 41-2421

- Viscosity**

- Constitutive law for sea ice and some applications. Hakkinen, S., [1987, p.81-90, eng] 41-4275

- Visual**

- Numerical modeling of optical features of falling snow. Martinez-Sanchez, M., et al, [1983, p.78-85, eng] 41-2314

- Forecasting fog dissipation with stratification improvement with stratus conditions. Kosheleko, I.V., [1986, p.50-58, rus] 41-2637

- Volcanic ash**

- Stable isotope stratigraphy of ice cores and the age of the last eruption at Mount Melbourne, Antarctica. Lyon, G.L., [1986, p.135-138, eng] 41-610

- Little Ice Age as recorded in the stratigraphy of the tropical Quelccaya Ice Cap. Thompson, L.G., et al, [1986, p.361-364, eng] 41-2860

- Sulphuric acid in the antarctic ice sheet. Legrand, M., et al, [1987, p.671-676, eng] 41-4325

- Volcanoes**

- Volcanism and glaciers in the Anthropocene. Melnikova, I.V., [1986, p.27-35, rus] 41-102

- Japanese earth science research at McMurdo Sound, 1985-1986. Kaminuma, K., [1986, p.138-147, jpn] 41-981

- Sedimentation at the foot of volcanoes in various climatic settings. Kuralenko, N.P., [1986, 111p., rus] 41-2363

- Melting glaciers pull the plug on volcanoes. Anderson, I., [1987, p.30, eng] 41-2365

- Reinterpretation of glaciovolcanic interactions in Marie Byrd Land. McIntosh, W.C., et al, [1985, p.57-59, eng] 41-2624

- Photogrammetry study of volcano-glacier interactions, Mount Wrangell, Alaska. Benson, C.S., et al, [1986, p.813-827, eng] 41-2742

- Effects of eruptions of Mount Redoubt on the flow of Drift Glacier, Alaska. Sturm, M., et al, [1986, p.355-362, eng] 41-4288

- Volume**

- See: Ice volume*

- Walls**

- Construction of low-rise buildings on seasonally freezing gravelly grounds. Polishchuk, A.I., et al, [1985, p.30-32, rus] 41-289

- Stresses on low-rise buildings on frost heaving ground. Abzhailimov, R.Sh., [1985, p.32-34, rus] 41-290

- Stresses in the hydraulic backfill. Knutsson, S., [1981, p.261-268, eng] 41-790

- In-situ assessment of two retrofit insulations. Flanders, S.N., [1986, p.32-44, eng] 41-1377

- Dynamic thermal performance of walls. Fazio, P., et al, [1986, p.255-271, eng] 41-1380

- Thermal resistance measurements of a well-insulated wall. Zarr, R.R., et al, [1986, p.957-973, eng] 41-1389

- Analysis about frost-crack damage of retaining wall. Xia, Z., [1986, p.281-286, chi] 41-1431

- Frost damage and prevention in hydraulic structures. Qi, Z., et al, [1986, p.299-304, chi] 41-1435

- Welded groove-and-tongue profiles for high strength bulwarks. Kuznetsov, A.I., et al, [1986, p.26-28, rus] 41-1534

- Underpinnings with ground freezing. Gudehus, G., et al, [1985, p.203-211, ger] 41-1562

- Thermal performance of the building envelope. Tabunshchikov, I.U.A., et al, [1986, 400p., rus] 41-1749

- Light North-makarov enclosures designed for the North. Makarova, N.A., et al, [1986, p.36-37, rus] 41-1889

- Microclimate of concrete walls. Hudec, P.P., et al, [1986, p.615-623, eng] 41-1997

- Increasing the thermoinsulative properties of lightweight concrete panels. Natsievskii, I.U.D., [1986, 88p., rus] 41-2647

- Construction of structures and foundations by the grout curtain method. Smorodinov, M.I., et al, [1986, 216p., rus] 41-2886

- Thermotechnical requirements for lightweight concretes used in the North. Makarova, N.A., et al, [1986, p.42-53, rus] 41-2919

- Improving thermal insulation of building walls. Mordukhovich, I.M., et al, [1986, p.53-60, rus] 41-2920

- Vertical ice forces on long straight walls. Christensen, F.T., [1987, p.215-218, eng] 41-3031

- Finite element method for analysis of frozen earth structures. Soo, S., et al, [1987, p.121-129, eng] 41-4489

- Service life of concrete enclosures in cold climates. Aleksandrovskii, S.V., [1986, p.122-167, rus] 41-4502

- Warning systems**

- See: Monitors*

- Waste disposal**

- Arctic water pollution research: applications of science and technology. [1986, 193p., eng] 41-339

- Biological accumulation and monitoring of chemical wastes in arctic waters. Perkins, E.J., [1986, p.1-11, eng] 41-340

- Snow meltwater impurities from sewage effluent. Zapf-Gilje, R., et al, [1986, p.151-156, eng] 41-351

- Impact of a scientific conference—conference summary. Bridge, W.A., [1986, p.185-190, eng] 41-353

- Water protection structures at railroads. Dikarevskii, V.S., et al, [1986, 211p. (pertinent p.123-211), rus] 41-517

- Drilling mud usage and discharge in the Arctic Ocean, 1978-1982. Evance, T.B., comp, [1985, 6p. + append., eng] 41-596

- Use and disposal of drilling fluids in the Arctic Ocean, 1983. Milburn, D., et al, [1986, 38p., eng] 41-597

- Use and disposal of drilling fluids in the Arctic Ocean, 1984. Milburn, D., et al, [1986, 47p., eng] 41-598

- Water supply and waste water dilution in permafrost regions. Kokovkin, A.V., [1986, p.57-67, rus] 41-1169

- Drilling fluids and cuttings discharges in Alaska. Houghton, J.P., et al, [1984, p.1-388, eng] 41-1782

- Antarctic terrestrial ecosystem. Walton, D.W.H., [1987, p.83-93, eng] 41-3740

- Treatment and disposal of alum and other metallic hydroxide sludges. Reed, S.C., et al, [1987, 40p. + plates, eng] 41-4142

- See also: Sewage disposal*

- Waste treatment**

- Sewage treatment in Yellowknife, N.W.T. Soniasy, R.N., et al, [1986, p.129-139, eng] 41-350

- Heat and mass transfer in soil. Shapiro, H.N., et al, [1978, p.19-24, eng] 41-465

- Freezing effect on waste contaminants. Iskandar, I.K., [1986, 33p., eng] 41-693

- Military wastewater treatment systems in cold regions. Reed, S.C., [1986, 23p., eng] 41-859

- Removal of trace-level organics by slow-rate land treatment. Parker, L.V., et al, [1986, p.1417-1426, eng] 41-1349

- Overland flow wastewater treatment at Easley, S.C. Abernathy, A.R., et al, [1985, p.291-299, eng] 41-1899

- Effect of snowmelt on the active sludge process. Särner, E., et al, [1982, p.17-33, swe] 41-2855

- Sludge freeze-thaw dewatering—an alternative for small wastewater treatment plants. Särner, E., et al, [1982, p.164-180, swe] 41-2856

- Problems and opportunities with winter wastewater treatment. Reed, S.C., [1986, p.16-20, eng] 41-2965

- Heat and mass transfer in soil subjected to artificial freezing. Conboy, M.J., [1987, 209p., eng] 41-3842

- Treatment and disposal of alum and other metallic hydroxide sludges. Reed, S.C., et al, [1987, 40p. + plates, eng] 41-4142

- Treatment and disposal of oil-based mud cuttings. Canadian Arctic. Drinnan, R.W., et al, [1987, 80p. + append., eng] 41-4532

- See also: Sewage treatment*

# Wastes

- Iron ore wastes used in construction materials in the North. Prokof'eva, V.V., et al, [1986, 176p., rus] 41-2214
- Biologic recultivation of industrial tailings in the Far North. Pereverzev, V.N., et al, [1986, 104p., rus] 41-2752
- Slag-pumice concrete for industrial construction. Krichevskii, A.P., et al, [1986, 84p. (Pertinent p.70-84), rus] 41-3022
- All-Union Conference on nuclear-physical methods of environmental management, 3rd, Tomsk, May 21-23, 1985. Proceedings. [1987, 172p., rus] 41-3944
- Estimation of industrial emission into the atmosphere. Boiarkina, A.P., et al, [1987, p.14-23, rus] 41-3945
- Pollution impact on the environmental functions of northern taiga. Chertovskoi, V.G., [1987, p.67-72, rus] 41-4569
- Influence of industrial wastes on vegetation of northern forest ecosystems. Egorova, V.N., et al, [1987, p.143-147, rus] 41-4570
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernen'kova, T.V., [1987, p.147-157, rus] 41-4571
- Studying shear strength of ash-slag wastes from thermal power plants located in the Northern climatic zone. Ogarkov, A.A., [1987, p.75-78, rus] 41-4624

# Water

- Thermodynamic properties of metastable systems and the kinetics of phase transformations. Nikitin, E.D., ed, [1985, 87p., rus] 41-552
- Supercooling and crystallization of water, heavy water and organic substances. Bogdanov, N.M., et al, [1985, p.30-43, rus] 41-553
- Freezing temperatures of water, alkanolic acids and their mixtures. Barr, R.S., et al, [1986, p.79-86, eng] 41-2017
- Unfrozen compartmentalized water in gels during cooling and warming. Murase, N., et al, [1986, p.5420-5426, eng] 41-2107
- Extended lattice model of water; two-sublattice, two-orientation model. Meijer, P.H.E., et al, [1982, p.124-142, eng] 41-2245
- Project of an inhabited lunar base. Shevchenko, V.V., [1986, p.85-98, rus] 41-2308
- Electronic structure of hydrogen-bonded H<sub>2</sub>O. Schmeisser, D., et al, [1983, p.3279-3286, eng] 41-2318
- Water in regolith from Mare Crisium (Luna 24)? Akhmanova, M.V., et al, [1978, p.285-288, rus] 41-3208
- Cubic ice from liquid water. Mayer, E., et al, [1987, p.601-602, eng] 41-3637
- See also: Ground water; Heavy water; Hygroscopic water; Lake water; Meltwater; River water; Salt water; Sea water; Soil water; Surface waters

# Water air interactions

See: Air water interactions

# Water balance

- Streamflow generation from subalpine forests. Troendle, C.A., [1985, p.240-247, eng] 41-450
- Estimating snow reserves, avalanches, runoff and water balance in the Kyzylchi River basin (based on aerial photography). Gapiashko, V.G., [1986, p.19-23, rus] 41-699
- Combined ice and water balance investigations at the Vernagtferner Glacier. Reinwarth, O., [1986, p.116-120, 233-236, eng] 41-1065
- Variability of hydrological characteristics in western Siberia. Nikitin, S.P., et al, [1986, 204p., rus] 41-1969
- Water storage in Storglaciären, Kebnekaise, Sweden. Östling, M., et al, [1986, p.279-290, eng] 41-3560
- Experimental study of water-balance elements of mountain catchment areas. Litovchenko, A.F., [1986, 186p., rus] 41-3742
- Hydrologic calculations for economic development of the BAM zone. Evstigneev, V.M., et al, [1986, p.156, rus] 41-3983

# Water cement ratio

- Ice formation in hardened cement paste. Bager, D.H., et al, [1986, p.709-720, eng] 41-1998
- Evaluating mix designs for cold weather concreting. Suprenant, B.A., [1987, p.49-57, eng] 41-2767
- Research in building engineering. Structural thermodynamics. Service life of structures. Polonskii, V.P., ed, [1986, 179p., rus] 41-4500

# Water chemistry

- Temperature, salinity and density profiles around icebergs in the Labrador Sea. Pearson, D.E., [1986, p.472-491, eng] 41-160
- Hydrochemical regime of lake and suprapermafrost ground water in alassy. Shishkina, N.P., [1985, p.110-130, rus] 41-258
- Monitoring seasonal changes in seafloor temperature and salinity. Sellmann, P.V., et al, [1986, p.110-114, eng] 41-369
- Biogenic silica accumulation in the Ross Sea. Ledford-Hoffman, P.A., et al, [1986, p.2099-2110, eng] 41-458
- Reports of US/USSR Weddell Polynya Expedition, Vol.8. Ackley, S.F., ed, [1986, 158p., eng] 41-460

# Hydrology and chemistry of glacial meltwater and snowmelt, Norway.

- Amos, J., [1985, p.52-60, eng] 41-584
- Chemical effects of sea water on sea ice melt water. Anderson, L.G., et al, [1985, p.90-96, eng] 41-592
- Accuracy of pH determination in glacial melt-waters. Metcalf, R.C., [1984, p.41-51, eng] 41-624
- Hypersaline gradients in two Canadian High Arctic lakes. Stewart, K.M., et al, [1986, p.1795-1803, eng] 41-1222
- Stream-water chemistry during snowmelt. Hendershot, W.H., et al, [1985, p.58-68, eng] 41-1485
- Integrated model of snowmelt quality for boreal forest sites. Roberge, J., et al, [1985, p.69-83, eng] 41-1486
- Influence of glacier water on the formation of the chemical composition of mountain river water. Gachechiladze, G.A., [1986, p.78-82, eng] 41-1692
- Dissolved-oxygen depressions under ice cover in two Yukon rivers. Whitfield, P.H., et al, [1986, p.1675-1679, eng] 41-1863
- Effects of snow and ice on wetland water chemistry. Campbell, J., et al, [1984, p.143-147, eng] 41-1955
- Ice cover effect on Odonata larvae in a pond. Beresford, D., [1984, p.165-181, eng] 41-1958
- Acid surge in a well-buffered stream. Jacks, G., et al, [1986, p.282-285, eng] 41-2311
- Vegetation, soils and ground water of central and southern taiga. Stepanov, A.M., et al, [1986, p.64-72, rus] 41-2347
- Water and bottom muds in reserve pits, Alaska. Pollen, M.R., [1986, 164p. + append., eng] 41-2451
- Snow and water chemistry of lakes in northern Saskatchewan. Shewchuk, S.R., [1983, 62p., eng] 41-2578
- Factors affecting snowmelt streamwater chemistry in the Black Forest (West Germany). Feger, K.H., et al, [1986, p.257-265, eng] 41-2621
- Modeling of solute processes during freezing in peat and overlying water. Li, X.-M., [1986, 119p., eng] 41-2639
- Effects of freezing on nitrite stability in aqueous solutions. Muneta, P., et al, [1987, p.22-23, eng] 41-2808
- Could the water redding of Lake Tovel (Trentino, Italy) be related to fluctuations of Alpine glaciers. Paganelli, A., [1985, p.83-88, ita] 41-3177
- Water chemistry during snowmelt in a northern basin. Barry, P.J., et al, [1984, p.137-155, eng] 41-3321
- Cationic denudation rate of an alpine glacial catchment. Metcalf, R.C., [1986, p.19-22, eng] 41-3523
- Modeling of BOD-D<sub>0</sub> dynamics in an ice-covered river in northern China. Hou, R., et al, [1987, p.247-251, eng] 41-3967
- Landscape conditions, hydrology and hydrochemistry of lakes in Central Priob'e. Tiul'kova, L.A., [1986, p.64-66, rus] 41-3977
- Nitrification: a significant cause of oxygen depletion under winter ice. Knowles, R., et al, [1987, p.743-749, eng] 41-4229
- Evolution of dissolved oxygen in the Arctic mixed layer. Top, Z., [1987, p.7191-7194, eng] 41-4271
- Dynamics and mass balance of ions in meltwater and runoff in boreal forest. Jones, H.G., et al, [1987, p.19-31, eng] 41-4314
- Sources of acidity during snowmelt at a forested site in the west-central Adirondack Mountains, New York. Peters, N.E., et al, [1987, p.99-108, eng] 41-4315

# Water content

- Rock moisture content and frost weathering. McGreevy, J.P., et al, [1985, p.337-346, eng] 41-1252
- Accretion of icy satellites of Jupiter and Saturn. Ahrens, T.J., et al, [1985, p.631-654, eng] 41-1728
- Water saturation and transfer in geosystems from remote sensing data. Mandych, A.F., et al, [1986, p.45-55, rus] 41-2735
- Thermal device for aircraft measurement of the solid water content of clouds. King, W.D., et al, [1986, p.356-362, eng] 41-3220
- Ice particle evolution in the anvil of a severe thunderstorm. Heymsfield, A.J., [1986, p.2463-2478, eng] 41-4052
- On the microstructure and ice water content of high clouds. Kosarev, A.L., et al, [1984, p.73-76, eng] 41-4375
- Deformation of pore-space structure in freezing fines. Lebedenko, I.U.P., [1987, p.50-63, rus] 41-4622
- See also: Snow water content; Unfrozen water content

# Water erosion

- Formation of a primitively-cryogenic weathering crust. Urov, I.U.L., [1986, p.119-121, rus] 41-1002
- Predicting the erosion of perennially frozen fines. Malinovsky, D.V., [1987, p.63-68, rus] 41-3397
- Shoreline evolution at a retreating Arctic coastal site. Reimnitz, E., et al, [1987, p.161-164, eng] 41-3469
- Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., [1986, p.62-63, rus] 41-3541
- River bank erosion and the influence of frost: a statistical examination. Lawler, D.M., [1986, p.227-242, eng] 41-4365

# Water films

- Self-similar solution of a problem of freezing of finely dispersed soils with allowance for moisture migration in thawed and frozen zones. Ianitskii, P.A., [1986, p.264-270, eng] 41-2208
- Thermal properties of cryogenic meadow-chenozem soils. Kulikov, A.I., [1984, p.126-130, rus] 41-4090
- Motion of sub-freezing ice past particles. Walder, J.S., [1986, p.41-4296, eng] 41-4296
- Erosion of ices by ion irradiation. Benit, J., et al, [1987, p.838-842, eng] 41-4330
- Physical properties of liquid layers between ice and adfrozen material. Fedoseeva, V.I., [1984, p.19-24, rus] 41-4510
- Water flow
- Flow patterns generated by an ice keel in stratified flow. Topham, D.R., et al, [1986, p.328-349, eng] 41-154
- Frost bulb with or without groundwater flow on a buried chilled Alaskan pipe. Perera, W.G., [1984, p.1850-1855, eng] 41-457
- Freezing of curved water pipes. Oiwake, S., et al, [1986, p.2151-2155, eng] 41-531
- Some observations on subglacial ground-water flow. Smart, C.C., [1986, p.224-231, eng] 41-683
- Delineation of glacier drainage basins on Hofsjökull and Western Vatnajökull. Björnsson, H., [1986, p.19-21, eng] 41-731
- Snow removal from roads by water flow in drains. Watanabe, Z., [1986, p.141-148, jpn] 41-1218
- Record St. Clair River ice jam of 1984. Derecki, J.A., et al, [1986, p.1182-1194, eng] 41-2114
- Ecological effects of canal diversion on Hudson and James Bays. Milko, R., [1986, p.316-326, eng] 41-2690
- Supercritical flume for measuring sediment-laden streamflow. Baker, M.B., Jr., [1986, p.847-851, eng] 41-3138
- Modelling of basal water flux under Ross Ice Shelf. Budd, W.F., et al, [1987, p.293-320, eng] 41-3286
- Channel processes, changes, and sediments in a proglacial braided river. Ashworth, P.J., et al, [1986, p.361-371, eng] 41-3566
- Control of spring run-off in northern rivers: the ice veil concept. Lock, G.S.H., [1987, p.451-457, eng] 41-3676
- Study of the nature and incidence of density currents in a shallow glacial lake. Weirich, F.H., [1986, p.396-413, eng] 41-3786
- Snow drain system—velocity formula for snow-laden water flow. Sato, T., et al, [1983, p.9-16, eng] 41-4133
- Basal water and high-pressure basal ice. Weertman, J., [1986, p.455-463, eng] 41-4301
- Frazil measured in the laboratory and in the field. Tsang, G., [1986, p.115-128, eng] 41-4515
- Dispersion in ice-covered lakes. Bengtsson, L., [1986, p.151-170, eng] 41-4516
- Water freezing
- See: Ice formation
- Water ice interface
- See: Ice water interface
- Water intakes
- Water supply in populated points of northern regions. Pavlov, G.D., et al, [1987, p.6-8, rus] 41-3934
- Water supply and sewage disposal in the Yamal Peninsula. Kataev, V.V., et al, [1987, p.8-9, rus] 41-3935
- Formulas for calculating mean water temperature at water intakes. Donovan, A.A., [1987, p.12-14, rus] 41-3936
- Water jets
- See: Hydraulic jets
- Water level
- Regionalization of winter low-flow characteristics of Tennessee streams. Bingham, R.H., [1986, 88p. + 2 maps, eng] 41-2137
- Pulsed fluctuations of water level in glacial rivers. Sokolov, D.P., [1986, p.99-103, rus] 41-2722
- Changes in geocryological conditions of water-reservoir basins. Onikienko, T.S., [1986, p.83-88, rus] 41-3450
- Construction of water-raising ice dams. Makarov, V.I., et al, [1986, p.161-171, rus] 41-3459
- See also: Sea level; Water table
- Water pipelines
- Energy loss of snow/water mixture flow at a T-junction of pipes. Shirakashi, M., et al, [1986, p.75-82, jpn] 41-440
- Water protection structures at railroads. Dikarevskii, V.S., et al, [1986, 211p. (Pertinent p.123-211), rus] 41-517
- Winter operating safety of tunnel water lines. Schmid, H.C., et al, [1986, p.324-326, ger] 41-1564
- Dynamics of the freezing over of underground pipes. Krasovitskii, B.A., [1987, p.1331-1337, eng] 41-4162
- Water pipes
- Heat distribution research. Petteplace, G., [1986, p.2-3, eng] 41-407
- Water-source heat pumps. Petteplace, G., [1986, p.14-15, eng] 41-408
- Density effects on laminar convection in water pipes near 4°C. Cheng, K.C., et al, [1978, p.67-72, eng] 41-464
- Freezing of curved water pipes. Oiwake, S., et al, [1986, p.2151-2155, eng] 41-531

**Water pollution**

- Effects of road salt upon stream invertebrates. Kersey, K., [1979, 12p. + append., eng] 41-232
- Chlorides in the Don River watershed resulting from road de-icing salt. Paine, R.L., [1979, 23p., eng] 41-234
- Sodium in domestic wells of York region. Joy, M., [1979, 17p., eng] 41-237
- Arctic water pollution research: applications of science and technology. [1986, 193p., eng] 41-339
- Biological accumulation and monitoring of chemical wastes in arctic waters. Perkins, E.J., [1986, p.1-11, eng] 41-340
- Fate of petroleum pollutants in Arctic ecosystems. Atlas, R.M., [1986, p.59-67, eng] 41-345
- Coastal ecology and the Arctic oil industry. Sendstad, E., [1986, p.87-96, eng] 41-347
- Microbial aspects of the Inuvik sewage lagoon. Henry, J.G., et al., [1986, p.117-128, eng] 41-349
- Petroleum residues in the Canadian Arctic marine environment. Levy, E.M., [1986, p.161-169, eng] 41-352
- Impact of a scientific conference—conference summary. Bridgeo, W.A., [1986, p.185-190, eng] 41-353
- Pollution protection of water resources in the Timan-Pechora Task Economic Complex. Brattsev, A.A., [1986, p.68-73, rus] 41-1170
- Ground-water contamination at Peters Creek, Municipality of Anchorage, Alaska: ground-water occurrence and movement. Munter, J.A., [1986, 12p., eng] 41-1351
- Outfall mixing design in shallow coastal water under Arctic ice cover. Jirka, G.H., et al., [1985, p.856-862, eng] 41-1913
- U.S. Coast Guard Arctic Pollution Response Research and Development. Fitzpatrick, M., [1985, p.863-865, eng] 41-1914
- Mapping the distribution of polluted ground water in cryogenic hydrogeological structures. Volkova, V.P., et al., [1986, p.95-99, rus] 41-2088
- Water pollution from roadways. Lygren, E., et al., [1985, 46p., norj] 41-2295
- Basic methods and principal results of studying the role of physical, chemical and biologic factors in the cleaning of Arctic waters and ice from petroleum hydrocarbons. Il'inski, V.V., et al., [1986, p.171-173, rus] 41-2390
- Experiments with joint action of vermiculture-based sorbents and the Barents Sea strains of petroleum oxidizing bacteria. Krasnikova, T.I., et al., [1986, p.178-180, rus] 41-2391
- Analysis of oil pollution in arctic seas, using biotechnological methods. Levchenko, A.B., et al., [1986, p.180-181, rus] 41-2392
- Natural sorbents for removing oil spills from northern sea waters. Mesiat, S.P., et al., [1986, p.181-183, rus] 41-2393
- Tracing fecal pollution by coprostanol in an ice-covered Finnish lake. Dureth, S., et al., [1986, p.131-149, eng] 41-2477
- Ice and sediment factors in selection of Inuit water supplies. Hermanson, M.H., [1986, 222p., eng] 41-2615
- Interaction of snowmelt water with terrestrial portion of shield catchment. English, M.C., et al., [1986, p.27-34, eng] 41-2616
- Temporal chemical variability in acid sensitive high elevation lakes. Welch, E.B., et al., [1986, p.35-44, eng] 41-2617
- Snowmelt acidic shock study in south central Ontario. Goodison, B.E., et al., [1986, p.131-138, eng] 41-2618
- Behavior of ionic contaminants in snowpack of Turkey Lakes watershed. Semkin, R.G., et al., [1986, p.215-221, eng] 41-2619
- Temporal variation in aluminum speciation and concentration during snowmelt. Hendershot, W.H., et al., [1986, p.231-237, eng] 41-2620
- Environmental protection in Siberia. Vorob'ev, V.V., [1985, p.52-60, rus] 41-3436
- Changes in ecosystems of the North due to economic development. Kruchkov, V.V., [1985, p.76-83, rus] 41-3438
- All-Union Conference on nuclear-physical methods of environmental management, 3rd, Tomsk, May 21-23, 1985. Proceedings. [1987, 172p., rus] 41-3944
- Micropollutant behavior in karst water systems during snowmelt. Simmlait, N., et al., [1987, p.79-95, eng] 41-3965
- Micropollutant behavior in karst water: karst filtration capacity. Simmlait, N., et al., [1987, p.97-109, eng] 41-3966
- Modeling of BOD-DO dynamics in an ice-covered river in northern China. Hou, R., et al., [1987, p.247-251, eng] 41-3967
- Regional landscape-geochemical investigations. Nechaeva, E.G., ed., [1986, 159p., rus] 41-4113
- Process of natural cleaning of the Arctic Basin surface (theoretical and experimental studies). Izmailov, V.V., [1986, p.51-58, rus] 41-4196
- Reactions of northern taiga soils and vegetation to industrial wastes. Chernen'kova, T.V., [1987, p.147-157, rus] 41-4571
- Water pressure**
- Ground-water fluctuations in hillslopes of coastal Alaska. Sidle, R.C., [1984, p.79-95, eng] 41-627

- Data sensitivities of sea ice drift and ocean stress. Walsh, J.E., et al., [1986, p.11,657-11,675, eng] 41-1023
- Water stress and currents under sea ice. Shirasawa, K., [1986, p.14,305-14,316, eng] 41-1858
- Subglacial aquifer bed model and water pressure dependent basal sliding. Lingle, C.S., et al., [1987, p.249-285, eng] 41-3284
- Basal water and high-pressure basal ice. Weertman, J., [1986, p.455-463, eng] 41-4301
- Water purification**
- See: Aeration; Water treatment
- Water reserves**
- Hydrologic instrumentation facilities. Wagner, C.R., [1986, p.209-218, eng] 41-538
- Snow water reserves in central Altai. Chubenko, A.G., [1986, p.105-111, rus] 41-1968
- Mapping the distribution of polluted ground water in cryogenic hydrogeological structures. Volkova, V.P., et al., [1986, p.95-99, rus] 41-2088
- Interactions between artificial lakes and permafrost. Afanasenko, V.E., et al., [1986, p.120-127, rus] 41-2092
- Water from glacier-dammed Russell Lake, Alaska. Seitz, H.R., et al., [1986, 10p., eng] 41-3303
- D/H ratios of snow and ground water in eastern New York State. Lawrence, J.R., [1987, p.519-521, eng] 41-3310
- Water resources of Alaska. Snyder, E.F., comp., [1987, 24p., eng] 41-3338
- Seasonal water budget models, Quebec, Canada. Wright, R.K., [1984, p.125-141, eng] 41-3354
- Changes in geocryological conditions of water-reservoir basins. Onikienko, T.S., [1986, p.83-88, rus] 41-3450
- Controlling filtration regimes of taliks beneath rivers by using pneumatic screens. Vasil'eva, I.A., et al., [1986, p.114-119, rus] 41-3454
- Calculation of ice volume of some mountain glaciers. Bakov, E.K., [1986, p.3-11, rus] 41-3806
- Winter runoff in Langtang Valley, Nepal Himalayas. Motoyama, H., et al., [1987, p.29-33, eng] 41-3912
- Water retention**
- Snowpack depletion in a forested catchment. Buttle, J.M., et al., [1985, p.267-271, eng] 41-1503
- Setting standards for water-resistance properties of road pavement materials for Siberian conditions. Shabanov, V.M., [1986, p.106-110, rus] 41-2758
- Water storage**
- Rational utilization and preservation of ground water in the Buryat ASSR. Rezanov, I.N., ed., [1986, 114p., rus] 41-3330
- Hydrogeological and engineering-geological prerequisites for the construction of water reservoirs and tailing dumps in the Buryat ASSR. Aduashinov, A.A., [1986, p.52-59, rus] 41-3331
- See also: Ice (water storage); Snow retention; Snow water equivalent; Water retention
- Water structure**
- Moisture in hygroscopic materials. Efimov, S.S., [1986, 160p., rus] 41-1044
- Raman scattering spectra at the water-ice phase transition. Glushkov, S.M., et al., [1986, p.836-839, rus] 41-3686
- Water supply**
- Methods of estimating economic losses from water pollution by dredging. Matveev, A.A., [1985, p.63-66, rus] 41-210
- Water protection structures at railroads. Dikarevskii, V.S., et al., [1986, 211p. (Pertinent p.123-211), rus] 41-517
- Assessment of a field water purification unit. Bouzoun, J.R., et al., [1986, 6p., eng] 41-529
- Use of natural resources and environmental protection in the Timan-Pechora Regional Economic Complex. Brattsev, A.P., ed., [1986, 119p., rus] 41-1167
- Water supply and waste water dilution in permafrost regions. Kokovkin, A.V., [1986, p.57-67, rus] 41-1169
- Pollution protection of water resources in the Timan-Pechora Task Economic Complex. Brattsev, A.A., [1986, p.68-73, rus] 41-1170
- Technical schemes for melting natural ice for water-supply systems. Vdovin, I.U.I., [1986, p.189-193, rus] 41-2176
- Ice and sediment factors in selection of Inuit water supplies. Hermanson, M.H., [1986, 222p., eng] 41-2615
- Drilling and completion of water bearing layers in permafrost. Kvashnin, G.P., [1987, 247p. (Pertinent p.128-138), rus] 41-3666
- Drilling complex for the Far North. Safullin, M.N., et al., [1986, p.30-31, rus] 41-3773
- Water supply in populated points of northern regions. Pavlov, G.D., et al., [1987, p.6-8, rus] 41-3934
- Water supply and sewage disposal in the Yamal Peninsula. Kataev, V.V., et al., [1987, p.8-9, rus] 41-3935
- Hydrologic calculations for economic development of the BAM zone. Evstigneev, V.M., et al., [1986, p.156, rus] 41-3983
- See also: Alimentation
- Water table**
- Carbon balance of arctic tundra. Peterson, K.M., et al., [1984, p.331-335, eng] 41-1234

- Vegetation, soils and ground water of central and southern taiga. Stepanov, A.M., et al., [1986, p.64-72, rus] 41-2347
- Water temperature**
- Ice and supercooled water evolution in convective clouds. Rodi, A.R., [1982, p.465-468, eng] 41-58
- Temperature, salinity and density profiles around icebergs in the Labrador Sea. Pearson, D.E., [1986, p.472-491, eng] 41-160
- Monitoring seasonal changes in seafloor temperature and salinity. Sellmann, P.V., et al., [1986, p.110-114, eng] 41-369
- Buoyancy induced flows in cold pure and saline water. Qureshi, Z.H., et al., [1986, p.1383-1392, eng] 41-565
- Optical cable properties under ice. Tanaka, M., et al., [1981, p.22(1)-(2)(4), eng] 41-661
- Physical oceanography near the North Pole. Pounder, E.R., [1986, p.11,763-11,773, eng] 41-1025
- Crystallization of motionless supercooled water. Smorygin, G.I., [1986, p.16-23, rus] 41-2148
- Convective flows of cold water over a flat surface. Jang, J.Y., et al., [1987, p.85-89, eng] 41-2406
- Prediction of vessel icing. Overland, J.E., et al., [1986, p.1793-1806, eng] 41-2845
- Measurement of water temperature during frazil ice formation. Williams, G.P., [1984, 7p., eng] 41-3239
- West Spitsbergen current and adjacent waters in Fram Strait. Weigel, A.M., [1987, 98p., eng] 41-3306
- On the response of the fjord Gullmaren under ice cover. Djurfeldt, L., [1987, p.1557-1567, eng] 41-3345
- Impact of present century climate fluctuations in the Northern Hemisphere. Wallén, C.C., [1986, p.245-278, eng] 41-3559
- Satellite based sea surface temperature determination. Walton, C., [1987, 58p., eng] 41-3570
- Niagara River ice boom: effects on environment. Rumer, R.R., Jr., et al., [1983, p.105-116, eng] 41-3573
- Cooling of water and air by melting ice. Fujiyoshi, Y., et al., [1987, p.97-102, eng] 41-3833
- Limnology of Garrow Lake, NWT, Canada. Dickman, M., et al., [1987, p.531-549, eng] 41-3854
- Stream water temperature observations in Langtang Khola, Nepal Himalayas. Suzuki, M., et al., [1987, p.25-28, eng] 41-3911
- Water temperature and heat flux at the base of river ice covers. Marsh, P., et al., [1987, p.33-50, eng] 41-4214
- Circulation and water masses of the East Greenland shelf. Bourke, R.H., et al., [1987, p.6729-6740, eng] 41-4233
- Current regimes across the East Greenland polar front, summer 1984. Manley, T.O., et al., [1987, p.6741-6753, eng] 41-4234
- Structure, internal waves and intrusions in the Greenland Sea ice edge zone. Foster, T.D., et al., [1987, p.6903-6910, eng] 41-4246
- Determining the thermal conductivity coefficient for thawed and frozen grounds. Danielian, I.U.S., et al., [1983, p.20-24, rus] 41-4483
- Reservoir with a submerged outlet tunnel during winter. Tvede, A.M., [1986, p.399-406, eng] 41-4518
- Water transport**
- Ice drift tracing of water circulation in the Arctic. Kuz'mina, N.P., et al., [1984, p.20-32, eng] 41-818
- Comments on *A heat balance for the Bering Sea ice edge*. Kantha, L.H., [1986, p.2205-2208, eng] 41-2843
- Morphology and lithogenesis of rock streams. Govorushko, S.M., [1986, 120p., rus] 41-2901
- Basic components of chemical balance of the Arctic Ocean. Rusanov, V.P., [1986, p.40-51, rus] 41-4195
- Northward flow in the Bering and Chukchi seas. Overland, J.E., et al., [1987, p.7097-7105, eng] 41-4264
- Mass balance of the Arctic Ocean. Rudels, B., [1987, 53p., eng] 41-4599
- Water treatment**
- Sewage treatment in Yellowknife, N.W.T. Soniassy, R.N., et al., [1986, p.129-139, eng] 41-350
- Corps of Engineers Land Treatment Research and Development program. Iskandar, I.K., [1986, p.17-18, eng] 41-406
- Water protection structures at railroads. Dikarevskii, V.S., et al., [1986, 211p. (Pertinent p.123-211), rus] 41-517
- Assessment of a field water purification unit. Bouzoun, J.R., et al., [1986, 6p., eng] 41-529
- Military wastewater treatment systems in cold regions. Reed, S.C., [1986, 23p., eng] 41-859
- Removal of trace-level organics by slow-rate land treatment. Parker, L.V., et al., [1986, p.1417-1426, eng] 41-1349
- Overland flow wastewater treatment at Easley, S.C. Abernathy, A.R., et al., [1985, p.291-299, eng] 41-1899
- Effect of snowmelt on the active sludge process. Särner, E., et al., [1982, p.17-33, swej] 41-2855
- Sludge freeze-thaw dewatering—an alternative for small wastewater treatment plants. Särner, E., [1982, p.164-180, swej] 41-2856
- Problems and opportunities with winter wastewater treatment. Reed, S.C., [1986, p.16-20, eng] 41-2965



- Implementing direct filtration and natural freezing of alum sludge. Fitch, D.E., et al, 1986, p.52-56, eng 41-3779
- Water supply in populated points of northern regions.**  
Pavlov, G.D., et al, 1987, p.6-8, rus 41-3934
- Treatment and disposal of alum and other metallic hydroxide sludges.** Reed, S.C., et al, 1987, 40p. + plates, eng 41-4142
- See also:* Aeration
- Water vapor**  
Simulation of orographic clouds with a nonlinear, time-dependent model. Cotton, W.R., et al, 1982, p.322-324, eng 41-24
- Anomalous streamer discharge in air with supercooled steam and its luminescence. Volisekhovskii, M.B., 1986, p.351-354, rus 41-1628
- Polymorphism in vapor deposited amorphous solid water. Mayer, E. et al, 1985, p.81-88, eng 41-1698
- Porous medium physical model of frost layers. Meng, F., et al, 1987, p.584-593, eng 41-3402
- Stratospheric aerosol descent in winter and effects on water vapor budget. Iwasaka, Y., 1986, p.13-18, eng 41-3654
- Planet Venus. Kondrat'ev, K.I.A., et al, 1987, 278p., rus 41-3689
- Water waves**  
Wind over ice: a mechanism for the generation of ice-coupled waves. Squire, V.A., 1986, p.115-128, eng 41-1587
- Shore based wave generators for ice management at cold region harbours. Andersen, P.F., 1986, p.479-499, eng 41-1614
- Waves under a small travelling wave field. Carstens, T., et al, 1986, p.331-341, eng 41-1814
- Dynamic loads on floating ice plate from uniformly moving body. Gushchin, V.V., et al, 1985, p.385-387, rus 41-2329
- Role of standing waves in dynamics of Weddell Sea ice sheet. Seidov, D.G., et al, 1986, p.90-93, eng 41-3681
- River wave response to the friction-inertia balance. Ferrick, M.G., et al, 1987, p.764-769, eng 41-4222
- See also:* Ocean waves
- Waterproofing**  
Hydrophobic coatings for diminishing concrete deterioration and frost-heave effects. Iarkin, I.G., et al, 1985, p.49-51, rus 41-300
- Waterproofing and corrosion prevention in hydraulic structures. Shchavalev, N.F., ed, 1985, 100p., rus 41-431
- Stresses in impervious screens induced by waves and adhered ice. Stabnikov, N.V., et al, 1985, p.33-38, rus 41-432
- Waterproofing interlayers for the improvement of water- and thermal regime of roadbeds. Ruvinskii, V.I., et al, 1985, p.23-24, rus 41-502
- Reinforced concrete plating for bridge reconstructions. Kvasha, V.G., et al, 1985, p.5-7, rus 41-507
- Roof blisters. Physical fitness building. Fort Lee, Virginia. Korhonen, C., et al, 1986, 15p., eng 41-2611
- Construction of structures and foundations by the grout curtain method. Smorodinov, M.I., et al, 1986, 216p., rus 41-2886
- Cold regions roof design. Tobiasson, W., 1987, p.457-458, eng 41-4277
- Watersheds**  
Watershed management in the eighties; proceedings. 1985, 317p., eng 41-448
- Streamflow generation from subalpine forests. Troendle, C.A., 1985, p.240-247, eng 41-450
- Snow management at ski areas: hydrologic effects. Kattelmann, R., 1985, p.264-272, eng 41-453
- Distribution regularities of mudflow foci in the Chechen-Ingush ASSR. Streshneva, N.P., 1985, p.46-58, rus 41-844
- Daily flow model of watersheds with snowmelt runoff, Colorado. Norris, J.M., et al, 1985, 32p., eng 41-3305
- Differentiations of seasonally and perennially frozen rocks in Severnoe Priamur'e. Pozdnyakov, I.V., 1986, p.96-106, rus 41-3490
- Satellite methods of studying avalanche formation. Laptev, M.N., et al, 1986, p.43-49, rus 41-3516
- Runoff in glacier-covered watersheds of Langtang Valley, Nepal. Fukushima, Y., et al, 1987, p.11-18, eng 41-3909
- Suspended sediments in a glaciated watershed of Langtang Valley, Nepal. Ohta, T., et al, 1987, p.19-24, eng 41-3910
- Hydrological data of Langtang Valley, Nepal Himalayas. Fukushima, Y., et al, 1987, p.115-120, eng 41-3923
- Wave propagation**  
Wave propagation and remote sensing. Pre-print volume. 1986, 10 chapters, eng 41-94
- Millimeter wave propagation in snow, rain and fog. Patterson, E.M., et al, 1986, p.6.5.1-6.5.4, eng 41-99
- Sound propagation above snow-covered and ground surfaces. McDaniel, O.H., et al, 1986, 59p., eng 41-242
- Glacier-generated earthquakes from Prince William Sound, Alaska. Wolf, L.W., et al, 1986, p.367-379, eng 41-262
- Methods of measuring elastic wave parameters in snow samples. Bagov, M.M., 1985, p.7-14, rus 41-838
- Arctic radio wave propagation. Taagholt, J., 1985, p.(7.1)1-(7.1)12, eng 41-958
- Shore based wave generators for ice management at cold region harbours. Andersen, P.F., 1986, p.479-499, eng 41-1614
- Big waves from polar lows. Dysthe, K.B., et al, 1986, p.297-309, eng 41-1812
- Waves under a small travelling wave field. Carstens, T., et al, 1986, p.331-341, eng 41-1814
- Observations of internal gravity waves under the Arctic pack ice. Levine, M.D., et al, 1987, p.779-782, eng 41-2327
- Transport over floating ice sheets. Hinchey, M.J., 1987, p.321-328, eng 41-2439
- Generation of unstable modes of the iceward-attenuating swell by ice breeze. Chu, P.C., 1987, p.828-832, eng 41-3996
- Experimental study of plastic wave velocity in snow. Sato, A., 1987, p.183-196, jpn 41-4007
- River wave response to the friction-inertia balance. Ferrick, M.G., et al, 1987, p.764-769, eng 41-4222
- Role of fracture in the attenuation rate of stress waves in snow. Hansen, A.C., et al, 1987, p.207-212, eng 41-4496
- Waves**  
*See:* Elastic waves; Internal waves; Microwaves; Ocean waves; Radio waves; Shock waves; Sound waves; Water waves
- Weather**  
Meteorology and climatology of snow avalanches in Montana. Butler, D.R., 1986, p.72-87, eng 41-73
- Climate of Antarctica. Papers presented at the All-Union Symposium on the Study of the Climate of Antarctica. Dolgin, I.M., ed, 1986, 213p., eng 41-3948
- Winter climatic conditions in the Somov Sea. Petrov, L.S., et al, 1986, p.72-79, eng 41-3951
- See also:* Meteorology
- Weather control**  
*See:* Artificial precipitation; Cloud seeding; Weather modification
- Weather forecasting**  
Weather forecasting—a tool for winter snow and ice control on roads. List, C., 1979, 20p., eng 41-235
- Synoptic-scale influences of snow cover and sea ice. Ross, B., et al, 1986, p.1795-1810, eng 41-988
- Ice detection and weather information systems. 1985, 127p., eng 41-1414
- Temporal air-temperature structure in the Antarctic. Donina, S.M., 1981, p.40-44, rus 41-2011
- Guide for extreme cold weather operations. Barclay, D.D., comp, 1986, c450p., eng 41-2483
- See also:* Frost forecasting; Long range forecasting
- Weather maps**  
*See:* Meteorological charts
- Weather modification**  
Numerical simulation of the artificial precipitation zone induced by seeding stratiform clouds with nucleating agents. Khvorostianov, V.I., et al, 1986, p.63-76, rus 41-1902
- Heterogeneous nucleation of ice on aerosol nuclei with modified surfaces. Bazzaz, T.V., et al, 1986, p.119-128, rus 41-1903
- Cloud physics of weather modification, pts. 1 and 2. Brahm, R.R., Jr., 1986, p.215-222, 308-315, eng 41-3137
- See also:* Cloud dissipation; Cloud seeding; Fog dispersal
- Weather observations**  
Swedish and Nordic polar research. Karlqvist, A., 1986, p.105-112, eng 41-967
- Low pressure weather systems in and around Norwegian waters. Bilello, M.A., 1986, p.53-66, eng 41-1799
- Homogeneity of series of mean monthly wind speed data for Soviet antarctic stations. Kolosova, N.V., 1981, p.45-54, rus 41-2012
- Weather stations**  
Automatic weather station data for 1985. Sievers, M.F., et al, 1986, 254p., eng 41-877
- Antarctic climate research, No.1. 1986, 31p., eng 41-1071
- USARP automatic weather station project. Stearns, C.R., 1986, p.5-12, eng 41-1072
- "IAGO-Katabatic" programme. André, J.C., et al, 1986, p.17-18, eng 41-1074
- Japanese activities on automatic weather observations. Fujii, Y., 1986, p.19-20, eng 41-1075
- Use of AWS on Bouvet Island. Vinje, T., 1986, p.21-22, eng 41-1076
- ANARE automatic weather station program. Allison, I., 1986, p.25-30, eng 41-1077
- Icing studies on Mt. Washington: an historical perspective. Rancourt, K.L., 1985, p.197-204, eng 41-1495
- Surface winds and buoy drift, eastern Beaufort Sea coast. Kozo, T.L., et al, 1986, p.13,011-13,032, eng 41-1860
- Wind and temperature regime on Adélie Land slopes. Kodama, Y., et al, 1986, p.6735-6741, eng 41-2141
- German automatic weather stations in the Arctic 1942-1945. Selinger, F., 1986, p.89-104, eng 41-2339
- Wind studies center in the Croix de Chamrousse (Isère) mountain environment. Perroud, P., et al, 1986, p.51-54, fre 41-3357
- Diak camera system for automatic recording of visual data: snow depth in field plots. Alberg, A.H., et al, 1987, p.927-929, eng 41-4230
- Weathering**  
Relative dating of Neoglacial moraine ridges in North Norway. Innes, J.L., 1984, p.53-63, eng 41-625
- Relationship between salt weathering debris production and temperature. Davison, A.P., 1986, p.335-341, eng 41-1778
- Weathering effects: slopes in mudrocks and over-consolidated clays. Taylor, R.K., et al, 1987, p.405-445, eng 41-3444
- See also:* Frost weathering; Permafrost weathering
- Welding**  
Explosion welding of a large diameter gas transmission pipeline. Justice, J.T., et al, 1986, p.1-13, eng 41-77
- Cast steels for sub-arctic offshore applications. Martikainen, H., et al, 1986, p.911-932, eng 41-1138
- Weld properties for ultra-heavy steel plates for offshore structures. Homma, H., et al, 1984, p.53-59, eng 41-1193
- Frame of the main building of the Neryungri power plant. Pavliukov, S.I., 1986, p.13-17, rus 41-1401
- Increasing frost resistance of steel bridges. Bol'shakov, K.P., 1986, p.12-14, rus 41-1888
- Development of high strength welding materials for low temperature service. Nakanishi, M., et al, 1986, p.97-105, eng 41-2312
- Construction of steel reservoirs under northern conditions. Popovskii, B.V., 1985, p.28-34, rus 41-2848
- Reliability of welded steel joints of main pipelines. Chaburkin, V.F., 1985, p.54-61, rus 41-2850
- Electric-arc welding under northern conditions. Larionov, V.P., 1986, 256p., rus 41-3511
- Low-temperature service facilities and recent status of their materials and welding. Saiga, Y., et al, 1986, p.1-21, eng 41-3785
- Large heat input welds for arctic offshore structures. Watanabe, S., et al, 1986, p.28-34, eng 41-3939
- High tensile strength steel plates for arctic offshore structures. Furusawa, J., et al, 1987, p.8-15, eng 41-3941
- High impact welding in Arctic pipeline construction. Loyer, A., 1987, p.99-108, eng 41-4630
- Duplex stainless steel pipeline for Arctic use. Taira, T., et al, 1987, p.159-165, eng 41-4635
- Well casings**  
Polyvinyl chloride well casings for ground water monitoring. Parker, L.V., et al, 1986, p.92-98, eng 41-1345
- Experience in casing wells in permafrost layers. Medvedskii, R.I., et al, 1987, p.62-65, rus 41-3774
- Wells**  
Sodium in domestic wells of York region. Joy, M., 1979, 17p., eng 41-237
- Mathematical models of well drilling processes in permafrost. Bugaev, V.G., 1978, p.69-73, rus 41-1324
- Ground-water contamination at Peters Creek, Municipality of Anchorage, Alaska: ground-water occurrence and movement. Munter, J.A., 1986, 12p., eng 41-1351
- Well site cleanup on the National Petroleum Reserve, Alaska. Smith, P.D.J., 1986, 49p. + append., eng 41-2450
- Thickness and temperature of permafrost in Kular Range. Sheshin, I.U.B., et al, 1986, p.47-50, rus 41-2818
- Drilling complex for the Far North. Safullin, M.N., et al, 1986, p.30-31, rus 41-3773
- See also:* Gas wells; Oil wells
- Wet snow**  
Method of calculating the warm-up date of snow cover. Brukhanda, V.I., et al, 1986, p.10-23, rus 41-771
- Forecasting wet snow avalanches from meteorological data. Drozdovskaya, N.F., et al, 1986, p.32-39, rus 41-773
- Dielectric properties of snow in the 3 to 37 GHz range. Hallikainen, M.T., et al, 1986, p.1329-1340, eng 41-2313
- Strong fluctuation theory for moist granular media. Stogryn, A., 1985, p.78-83, eng 41-2322
- Seasonal and regional variations of active/passive microwave signatures of sea ice. Livingstone, C.E., et al, 1987, p.159-173, eng 41-3316
- Relation of millimeter-wavelength backscatter to surface snow properties. Williams, L.D., et al, 1987, p.188-194, eng 41-3318
- Measurements of the snow fraction in a snow/water mixture flow in a pipe. Shirakashi, M., et al, 1986, p.2156-2160, eng 41-3407
- Effects of free water on snow gliding. McClung, D.M., et al, 1987, p.6301-6309, eng 41-3644
- Grain growth in a wet arctic snow cover. Marsh, P., 1987, p.23-31, eng 41-4213
- See also:* Slush

- Wettability**  
Soil stabilization by wetting and detonation. Takhirov, I.G., et al, 1986, p.16-19, rusj 41-880  
Modified method for intensive dynamic compaction of weak soils. Marinescu, K., 1986, p.73-78, engj 41-1851  
Cyclic swelling of clays. Osipov, V.I., et al, 1987, p.23-36, rusj 41-3399  
Non-destructive control method for studying thixotropic changes in clayey grounds. Voznesenskii, E.A., et al, 1987, p.80-94, rusj 41-3400
- Wharves**  
Field studies of mooring structures in the Far North. Kizim, A.G., 1986, p.82-85, rusj 41-904  
See also: Docks; Piers
- Wheels**  
See: Vehicles wheels
- Wind chill**  
Wind-chill indices—a review. Dixon, J.C., et al, 1987, p.1-17, engj 41-3576
- Wind direction**  
Surface wind along the Icefield Ranges, Yukon Territory, Canada. Nickling, W.G., et al, 1985, p.125-134, engj 41-1224  
Surface winds and buoy drift, eastern Beaufort Sea coast. Kozo, T.L., et al, 1986, p.13,011-13,032, engj 41-1860
- Wind erosion**  
Deflation of salts from ice surface in the Aral Sea. Tsytsarin, A.G., 1986, p.62-69, rusj 41-1971  
Relation between the susceptibility of permafrost landscapes and topographic dissection. Klimovskii, I.V., et al, 1986, p.113-121, rusj 41-3492  
Stability of forest ecosystems at their northern limit of distribution. Kazakov, L.A., 1986, p.62-63, rusj 41-3541  
Terrace scarp wind erosion in Arctic East Greenland. Swett, K., et al, 1987, p.45-52, engj 41-4224
- Wind factors**  
Ice loads on power lines in windy weather. Shurygin, V.P., et al, 1985, p.100-107, rusj 41-1545  
Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, 1986, p.36-41, rusj 41-2918  
Icing and wind loading on a simulated power line. Govoni, J.W., et al, 1986, p.23-27, engj 41-2967  
In situ burning of oil in experimental ice leads. Brown, H.M., et al, 1987, 27p., engj 41-3075  
Calculating heat balance constituents of soil surface. Konstantinov, A.R., et al, 1986, p.62-66, engj 41-3679  
Snow cover distribution in a system of young poplar strips. Zarudnyi, I.A.K., 1987, p.45-46, rusj 41-3745  
Influence of katabatic wind on snow and ice ablation. Ohata, T., 1986, p.25-29, 144-147, rusj 41-4335
- Wind (meteorology)**  
USARP automatic weather station project. Stearns, C.R., 1986, p.5-12, engj 41-1072  
Proceedings of the International Conference on Polar Winds, 1986, 1986, 364p., engj 41-1795  
Climatological study of gale-producing polar lows near Norway. Wilhelmssen, K., 1986, p.31-39, engj 41-1798  
Structure of polar lows over the Norwegian and the Barents Seas. Shapiro, M.A., 1986, p.79-90, engj 41-1800  
Examples of the operational utility of radar observations of cold air vortices. Monk, G.A., et al, 1986, p.247-256, engj 41-1808  
Predicted hazard area for a polar low. Eidsvik, K.J., 1986, p.273-277, engj 41-1810  
Ocean wave phenomena observed with an adaptive multifrequency radar system. Gjessing, D.T., et al, 1986, p.311-327, engj 41-1813  
Wind and temperature regime on Adélie Land slopes. Kodama, Y., et al, 1986, p.6735-6741, engj 41-2141  
45 m mast for boundary layer meteorological research. Ekström Ice Shelf. Belitz, H.-J., et al, 1987, p.5-10, engj 41-2844  
Modern sediments of the Terra Nova Bay polynya. Hughes, P., et al, 1985, p.107-108, engj 41-2949  
Surface windfield over the antarctic ice sheet. Parish, T.R., et al, 1987, p.51-54, engj 41-3683  
Wind regime of San Rafael Glacier, Patagonia. Inoue, J., 1987, p.25-30, engj 41-3824  
Generation of unstable modes of the iceward-attenuating swell by ice breeze. Chu, P.C., 1987, p.828-832, engj 41-3996  
See also: Avalanche wind
- Wind pressure**  
Data sensitivities of sea ice drift and ocean stress. Walsh, J.E., et al, 1986, p.11,657-11,675, engj 41-1023  
Formula for calculating ice and wind loads on wires. Gonchar, L.G., et al, 1986, p.37-38, rusj 41-1923  
Accuracy of surface geostrophic wind forecasts in the central Arctic. Moritz, R.E., 1986, p.1135-1161, engj 41-3004  
Structural load estimates from geographically sparse data. Tallin, A., et al, 1987, p.628-632, engj 41-3406
- Wind stress over rough ice in the ice edge zone, 1984. Anderson, R.J., 1987, p.6933-6941, engj 41-4249
- Wind tunnels**  
Melting of spherical ice particles. Rasmussen, R.M., et al, 1982, p.388-391, engj 41-42  
Correlation of icing relationships with airfoil and rotorcraft icing data. Flemming, R.J., et al, 1986, p.737-743, engj 41-802  
Conversion of a low-speed wind tunnel to a snowdrift wind tunnel. Anno, Y., et al, 1986, p.291-294, engj 41-1296  
Mechanical properties of atmospheric ice. Druetz, J., et al, 1986, p.67-74, engj 41-1305  
Snow cover erosion during wind-stream flow around an obstacle. Martynenko, A.A., 1986, p.160-165, rusj 41-1661  
Wind tunnel investigation on the riming of snowflakes. Lew, J.K., et al, 1986, p.2392-2417, engj 41-2360  
Vertical wind tunnel for snow process studies. Takahashi, T., et al, 1986, p.182-185, engj 41-3219  
Natural rotor icing on Mount Washington, New Hampshire. Itagaki, K., et al, 1986, 62p., engj 41-3480  
Concentration and flux of wind-blown snow. Mellor, M., et al, 1986, 16p., engj 41-3928  
Wind tunnel investigation of the riming of model ice crystal aggregates. Rasmussen, R.M., et al, 1984, p.151-155, engj 41-4380  
Experimental study on the initiation of blowing snow. Kobayashi, S., et al, 1985, p.195-200, jpnj 41-4588
- Wind velocity**  
Boundary layer studies at Terra Nova Bay. Bromwich, D.H., 1986, p.13-16, engj 41-1073  
"LAGO-Katabatic" programme. André, J.C., et al, 1986, p.17-18, engj 41-1074  
Wind/wave tank tests of drifting iceberg models. McTaggart, K.A., et al, 1986, p.364-379, engj 41-1107  
Wind over ice: a mechanism for the generation of ice-coupled waves. Squire, V.A., 1986, p.115-128, engj 41-1587  
Norwegian Polar Lows Project. Lystad, M., 1986, p.1-16, engj 41-1796  
Big waves from polar lows. Dysthe, K.B., et al, 1986, p.297-309, engj 41-1812  
Waves under a small travelling wave field. Carstena, T., et al, 1986, p.331-341, engj 41-1814  
Surface winds and buoy drift, eastern Beaufort Sea coast. Kozo, T.L., et al, 1986, p.13,011-13,032, engj 41-1860  
Modeling high-velocity winds and low air temperature over seas. Koshinskii, S.D., et al, 1986, p.90-107, rusj 41-1972  
Homogeneity of series of mean monthly wind speed data for Soviet antarctic stations. Kolosova, N.V., 1981, p.45-54, rusj 41-2012  
Surface wind velocity profiles in Antarctica. Kolosova, N.V., 1981, p.55-62, rusj 41-2013  
Theory for scalar roughness and transfer coefficients over snow and ice. Andreas, E.L., 1987, p.159-184, engj 41-2364  
Prediction of vessel icing. Overland, J.E., et al, 1986, p.1793-1806, engj 41-2845  
Forecasting sea ice movement through Bering Strait. Kozo, T.L., et al, 1987, p.193-207, engj 41-3079  
Eolian dunes in Victoria Land. Miotke, F.-D., 1985, p.79-125, gerj 41-3252  
Crystal structure of ice accreted on an ice substrate. Nasello, O.B., et al, 1987, p.120-122, engj 41-3604  
Parameterization of critical wind speed to cause drifting snow. Kondo, J., 1987, p.67-73, jpnj 41-4321  
Determining the velocity of sea-surface wind from radar data of the KOSMOS-1500 satellite. Vol'pian, G.V., et al, 1987, p.3-11, rusj 41-4620
- Windows**  
Air-flow windows for the Arctic and sub-Arctic. Neff, P.W., 1986, 54p., engj 41-250  
Improved thermal insulation in windows by laminar airflows. Tjellflaet, P.O., et al, 1986, p.992-1003, engj 41-1391  
Thermal performance of the building envelope. Tabunshchikov, I.U.A., et al, 1986, 400p., rusj 41-1749  
Device for attachment to motor vehicle windows to prevent fogging or icing. Schmitt, W., 1983, 6 col., engj 41-1767
- Winter concreting**  
Concretes for high dams. Sudakov, V.B., ed, 1985, 101p., rusj 41-413  
New air-entrainment and plastifying admixture for concretes. Berger, T.F., et al, 1985, p.9-13, rusj 41-415  
Frost resistance of concretes and their structure. Bel', A.A., 1985, p.36-38, rusj 41-417  
Concrete frost resistance in areas of variable water levels. Kargin, G.M., 1985, p.44-49, rusj 41-418  
Concretes with complex admixtures for the Sayano-Shushenskaya dam. Ginzburg, Ts.G., et al, 1985, p.71-73, rusj 41-419  
New compound admixture for highly frost-resistant poured concretes. Sudakov, V.B., et al, 1986, p.15-16, rusj 41-879
- Concrete admixtures for permafrost areas. Frishter, V.I.U., 1986, p.45-46, rusj 41-881  
Statistical nature of concrete frost resistance indices. Filonidov, A.M., 1986, p.65-66, rusj 41-884  
Thermos method of winter concreting. Zubkov, V.I., et al, 1986, p.118-122, rusj 41-907  
Antifreezing admixtures. Ratinov, V.B., et al, 1986, p.430-479, engj 41-1032  
Subway construction under severe climatic conditions. Smirnov, S.A., et al, 1986, p.15-17, rusj 41-1532  
Resistance of massive concrete structures to thermal cracking. Trapeznikov, L.P., 1986, 271p., rusj 41-1986  
Proposed standard specification for cold weather concreting (ACI 306.1). Carino, N.J., et al, 1986, p.1043-1047, engj 41-2473  
Winter concreting at the Bol'shoy Almaatinskiy Channel. Garifulin, V.M., et al, 1985, p.18-19, rusj 41-2552  
Calculating frost resistance of concrete used in land reclamation construction. Shlaen, A.G., 1986, p.19-22, rusj 41-2553  
Designing canal linings for frost heaving ground. Alimov, A.G., 1986, p.19-24, rusj 41-2554  
Energy-saving techniques for winter works. Zhuiko, P.I.A., 1986, p.18-20, rusj 41-2557  
Evaluating mix designs for cold weather concreting. Suprenant, B.A., 1987, p.49-57, engj 41-2767  
Experimental use of rolled concrete mixtures in freezing weather. Vasilievskii, V.V., et al, 1987, p.8-12, rusj 41-2798
- Earthwork organization for construction of Kureyskaya power plant dams. Baisanikov, G.G., et al, 1986, p.45-49, rusj 41-2868  
Concrete work at the Kureyskaya power plant site. Bukhman, V.I., 1986, p.50-54, rusj 41-2869  
Studies and calculations in structural design and building technology of hydraulic transport structures. Shkol'nikov, I.E., ed, 1986, 96p., rusj 41-2908  
Improvement of technology and quality control of concreting moorings in the northeastern Ob'-Irtys' Basin. Polakov, B.I., et al, 1986, p.59-68, rusj 41-2910  
Hydraulic power construction in the North. Kuperman, V.L., et al, 1987, 304p., rusj 41-3013  
Integrated groups of concrete-placing equipment in polar regions. Nesterov, V.V., et al, 1987, p.5-7, rusj 41-3065  
Studies of pore structure of concretes with air-entrainment admixtures. Ianbykh, N.N., 1987, p.34-35, rusj 41-3614  
Manual for construction foremen working in the northern construction-climatic zone. Berezovskii, B.I., et al, 1986, 328p., rusj 41-3664  
Concrete with A.C.F. admixture for transportation engineering. Solomatov, V.I., et al, 1986, 63p., rusj 41-3803  
Concrete lining of tunnels. Belkin, M.N., et al, 1987, p.63-67, rusj 41-3809  
Paving in cold areas. 1987, 1027p. (2 vols.), engj 41-4019  
Methods of acting on the state of stress of massive concrete hydraulic structures. Garkun, L.M., et al, 1987, 111p., rusj 41-4123  
Making concrete dams monolithic by cementing structural joints. Argal, E.S., 1987, 119p., rusj 41-4150  
Frost resistance and waterproofness of steamed fine-grained concretes. Orlov, M.T., et al, 1987, p.74-77, rusj 41-4626
- Winter construction**  
See: Cold weather construction
- Winter maintenance**  
Economic impact of roadblocks during thaw periods of the 1984-85 winter. Bouzigues, J.B., et al, 1986, p.51-59, frej 41-172  
Application rates of salt on highways and sidewalks. Adamache, M., et al, 1980, 51p., engj 41-239  
Winter maintenance practice and research in Ontario. Fromm, H.J., 1978, p.1-4, engj 41-378  
Winter Service Congress, 1985. 1985, 68p., gerj 41-384  
Ecological factors in the winter service. Dedić O., 1985, p.11-16, gerj 41-385  
Winter service in Steiermark, Austria. Dirnböck, G., 1985, p.17-21, gerj 41-386  
Winter service on main-street network in Slovenia. Ocvirk, R., 1985, p.31-35, gerj 41-387  
Winter service on the municipal highways. Sauer, A., 1985, p.37-40, gerj 41-388  
Optimization of the winter service in Rheinland-Pfalz. Rude, B.J., 1985, p.41-46, gerj 41-389  
Prevention of naled formation on Kirghizian mountain roads. Turgunbaev, A.T., 1985, p.26-27, rusj 41-504  
Passing spring meltwater when pipes are clogged by nalds. Dement'ev, V.A., 1986, p.16-17, rusj 41-511  
Preservation of protective forest vegetation. Pod'iachev, G.P., 1986, p.15, rusj 41-514  
Vehicular transport at McMurdo. Dibbern, J.S., 1986, 31p., engj 41-638  
Potential for use of natural brines in highway applications. Sack, W.A., et al, 1985, p.1-8, engj 41-654

- Calcium magnesium acetate research in Washington State.  
Ernst, D.D., et al, [1985, p.8-12, eng] **41-655**
- Staffing of maintenance crews during winter months.  
Rissel, M.C., et al, [1985, p.12-21, eng] **41-656**
- Levels of services in winter road maintenance.  
Charpentier, G., et al, [1986, p.30-33, ita] **41-866**
- Shelters provide bad-weather protection, secure construction progress. [1986, p.1424-1429, ger] **41-1563**
- Winter operating safety of tunnel water lines. Schmid, H.C., et al, [1986, p.324-326, ger] **41-1564**
- Method of preparing snow and ice control compositions.  
Stöckel, R.F. [1983, 6 col., eng] **41-1776**
- Snow research started. Palosuo, E., et al, [1983, p.59-60, fin] **41-1933**
- Maintenance measures and road safety. Roine, M., et al, [1983, p.262-266, fin] **41-1934**
- Protecting searching devices of supersonic flaw-detection cars from icing. Paulus, S.V., [1986, p.121-125, rus] **41-2144**
- Providing hydrometeorological information for building ice roads and crossings in the Irkutsk Region and the Buryat ASSR. Furman, M.Sh., [1986, p.217-221, rus] **41-2182**
- Structural heat-engineering for road pavements.  
Mikhailov, A.V., et al, [1986, 149p., rus] **41-2210**
- Winter maintenance of roads with heavy traffic, Italy.  
Maggioretti, P., [1986, p.48-56, ita] **41-2231**
- Winter maintenance of urban roads with high traffic performance. Baiano, G., [1986, p.57-61, ita] **41-2232**
- Operation of light air cushion vehicle at McMurdo Sound.  
Dibbern, J.S., [1987, 139p., eng] **41-2257**
- Focus on snow and ice control. [1986, p.30-31, eng] **41-2310**
- Winter maintenance of roads. Popp, C., [1986, p.536-540, ger] **41-2324**
- Introduction to the International Winter Road Congress, 1986. Suonio, V., [1986, p.33-34, eng] **41-2486**
- Winter serviceability in PIARC member countries.  
Lannoy, H. de, [1986, p.35-48, eng] **41-2487**
- Traffic safety, service quality and road maintenance.  
Rudolfsson, A., [1986, p.49-77, eng] **41-2488**
- Test results: performance of two ice-retardant overlays. [1986, p.30-33, eng] **41-2696**
- Huzzahs for city's snowfighting program. Langseth, R.L., [1986, p.64-65, eng] **41-2701**
- Strength of materials and structural elements at low temperatures. Cherskii, N.V., ed, [1985, 119p., rus] **41-2846**
- Working fitness and durability of equipment in the North.  
Larionov, V.P., et al, [1985, p.5-13, rus] **41-2847**
- Gas-thermal methods of rebuilding equipment for the North. Tiunin, V.D., et al, [1985, p.116-119, rus] **41-2853**
- Road design, allowing for climatic impact on traffic conditions. Vasil'ev, A.P., [1986, 248p., rus] **41-2894**
- Fundamentals of the evaluation of environmental and climatic conditions for planning construction workers' settlements at new railroad construction sites of northern West Siberia. Sobchenko, M.S., et al, [1986, p.36-41, rus] **41-2918**
- Snow removal equipment, snowplows, road cleaning machines. Teklin, V.G., [1986, 232p., rus] **41-3011**
- Electronic monitoring and telematics for traffic protection along state roads. Ortolani, E., [1987, p.16-19, ita] **41-3307**
- Winter maintenance of highways. Lazzarotti, G., [1987, p.20-22, ita] **41-3308**
- Operation of power equipment of gas pipelines in western Siberia. Ivanov, V.A., et al, [1987, 143p., rus] **41-3687**
- Winter maintenance and testing of main pipelines.  
Zinov'ev, V.N., et al, [1987, p.29-31, rus] **41-3736**
- Paving in cold areas. [1987, 1027p. (2 vols.), eng] **41-4019**
- Measurement and maintenance of runway friction at Canadian airfields. Argue, G.H., et al, [1987, p.949-979, eng] **41-4049**
- See also: Snow removal
- Winter operation**  
See: Cold weather operation
- Winter performance**  
See: Cold weather performance
- Winter road service**  
See: Road maintenance; Snow removal; Winter maintenance
- Wood**  
Wood damage accumulation by stochastic load models.  
Corotis, R.B., et al, [1986, p.2402-2415, eng] **41-2222**
- Wood ice friction**  
Methods of studying contact interactions of materials with ice and snow. Igoshin, V.A., et al, [1984, p.3-7, rus] **41-4504**
- Derivation of the polymer-snow friction coefficient.  
Ermakov, K.K., [1984, p.12-15, rus] **41-4507**
- Problem of diminishing the force of icebreaker friction against ice. Maksutov, D.D., [1984, p.15-16, rus] **41-4508**
- Physical properties of liquid layers between ice and adfrozen material. Fedoseeva, V.I., [1984, p.19-24, rus] **41-4510**
- Wood snow friction**  
Methods of studying contact interactions of materials with ice and snow. Igoshin, V.A., et al, [1984, p.3-7, rus] **41-4504**
- Derivation of the polymer-snow friction coefficient.  
Ermakov, K.K., [1984, p.12-15, rus] **41-4507**
- Work time standards**  
Calculation of optimal work time for polar conditions.  
Musatova, M.M., [1986, p.50-51, rus] **41-1890**
- Organization of construction under special environmental and climatic conditions. Construction manual.  
Shakhparonov, V.V., et al, [1986, 255p., rus] **41-2862**
- X ray analysis**  
Structural anomalies in ice-forming silver iodide aerosols.  
Borovol, N.A., et al, [1986, p.97-99, rus] **41-1454**
- Density of accreted ice. Prodi, F., et al, [1986, p.1081-1090, eng] **41-1476**
- Low temperature X-ray analysis of water/poly(oxyethylene) systems. Bogdanov, B., et al, [1986, p.628-634, eng] **41-2573**
- Observation of internal structure in sea ice by X-ray computed tomography. Kawamura, T., et al, [1986, p.59-67, jpn] **41-3880**
- X ray diffraction**  
X-ray diffraction and ice nucleation studies of AgI-AgCl solid solutions. Palanisamy, M., et al, [1986, p.1005-1009, eng] **41-2467**
- Young ice**  
Use of sea ice for cargo unloading. Nazintsev, I.U.L., et al, [1986, p.120-126, rus] **41-1268**